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ABSTRACT

A demonstration program to build on the health experience in the Head Start Program was launched. A special target group (siblings of Head Start children) was identified, although other economically disadvantaged children from 0 to 6 years of age were also to be served. This project report is divided into seven chapters. Chapter 1 gives the introduction and a summary. Chapter II addresses the evaluation results and methodological issues related to the first year Health Start Program. Chapter III describes Health Starts progress in meeting the program objectives; Chapter IV addresses the guideline requirements; Chapter V shows projects planned and the actual performance of individual Health Start projects. Technical assistance offered to the projects is addressed in Chapter VI; and major conclusions and recommendations are presented in Chapter VII. (Author/CK)

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HEALTH START:
Final Report of the Evaluation of the First Year Program

by

Leona M. Vogt
Joseph S. Wholey

September 29, 1972

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TABLE OF CONTENTS

		Page
I.	INTRODUCTION AND SUMMARY	I-1
	A. General Background	I-1
	B. Development of the Health Start Program	I-1
	C. Summary of Health Start Program	I-3
	D. Sources of Data Used	I-4
	1. Reporting System Forms and Evaluation Handbook	I-4
	2. Start-up Interviews	I-5
	3. Site Visits	I-5
	4. Medicaid Questionnaire	I-6
	5. Fiscal Reporting System	I-6
	E. Major Conclusions and Recommendations	I-6
	F. Overview of Report	I-7
II.	EVALUATION RESULTS AND METHODOLOGICAL ISSUES RELATED TO THE EVALUATION OF THE FIRST-YEAR HEALTH START PROGRAM	II-1
	A. Health Start Program Impact	II-1
	1. Are Health Start Projects Having Incremental Effects on Health Services for Children?	II-1
	2. Are Health Start Projects Having Incremental Effects on Children's Health Status?	II-6
	B. Relative Effectiveness Evaluation: How Are Health Start Project Results Related to Community Characteristics? To Characteristics of Pre-Existing Medical Services? To Project Characteristics?	II-7
	1. Overall Project Results	II-7
	2. Correlation of Individual Output Measures with Selected Input and Process Variables	II-16
	C. Planned Variation Approach For Third Year Health Start	II-22
	D. Applications of Knowledge Gained in Year Two	II-25

	Page
III. ASSESSMENT OF THE HEALTH START PROGRAM: PROGRESS IN MEETING PROGRAM OBJECTIVES	III-1
A. Introduction	III-1
B. Objective #1: Increasing the Number of Children Receiving Head Start-Like Health Services	III-1
C. Objective #2: Developing Methods to Deliver Health Services to Children in Areas of Limited Resources	III-3
1. Center, Colorado	III-5
2. Nogales, Arizona	III-7
D. Objective #3: Working with Other Local, State and National Agencies to Assist in Providing Health Services to Poor Children	III-8
1. Federal Level Assistance in the Coordination of Resources	III-9
2. Coordination at the Regional Level	III-10
3. Coordination at the Local Level	III-11
IV. ASSESSMENT OF THE HEALTH START PROGRAM: MEETING GUIDELINE REQUIREMENTS	IV-1
A. Interpretation of Guideline Requirements	IV-1
B. Headquarters Staff	IV-1
C. The Regional Offices	IV-3
1. Soliciting Support from the HEW Agencies	IV-4
2. Involvement of Regional Medical and Public Health Service Dental Consultants	IV-4
3. Use of Health Start Models	IV-5
4. Regional Plans	IV-6
5. Selection of the Grantees	IV-6
6. Funding the Projects	IV-9
D. The Projects	IV-9
1. Planning and Proposals	IV-9

		Page
	2. Staff	IV-12
	3. Administrative vs. Health Service Expenditures	IV-13
	4. Health Services	IV-13
	5. Coordination of Resources	IV-17
	6. Health Education	IV-17
V.	ASSESSMENT OF HEALTH START PROJECTS: PLAN VS. PERFORMANCE	V-1
	A. Enrollment	V-1
	B. Cost per Child	V-3
	C. Health Services and Health Education	V-5
VI.	TECHNICAL ASSISTANCE PROVIDED TO THE PROJECTS	VI-1
	A. OCD Headquarters Staff	VI-1
	B. OCD Regional Office Staffs	VI-1
	C. American Academy of Pediatrics	VI-1
	D. U.S. Public Health Service Dental Consultants	VI-3
	E. Region X Dental Activities	VI-5
VII.	CONCLUSIONS AND RECOMMENDATIONS	VII-1
	A. Conclusions	VII-1
	1. Impact of the Health Start Program	VII-1
	2. Relationship of Project Results to Project Characteristics	VII-2
	3. Meeting Program Objectives	VII-2
	4. Administrative Structure of the Program	VII-3
	5. Planning	VII-3
	6. Project Start-Up	VII-4
	7. Project Management	VII-4

	Page
8. Serving Migrants	VII-5
9. Health Education	VII-5
10. Record Transmittal and Future Care	VII-5
11. Technical Assistance to Projects	VII-6
12. Costs	VII-6
B. Recommendations	VII-7
1. The Headquarters Staff	VII-7
2. The Regional Office Staffs	VII-9

APPENDICES

APPENDIX A - Memorandum To Assistant Regional Directors From Edward Zigler, Director, Office of Child Development, February 18, 1971.

APPENDIX B - Fact Sheet, Health Start, OCD, March 1971.

APPENDIX C - Medicaid Support for Health Start - Joint Statement on Coordination between Title XIX and the Office of Child Development's Head Start Program and Medicaid Questionnaire.

APPENDIX D - Performance Data on Health Services Provided by Projects

APPENDIX E - Correlations of Selected Input, Process and Output Variables of Health Start Projects

APPENDIX F - Urban Institute Reporting System: Background and Control Sheets

APPENDIX G - Urban Institute Reporting System: Fiscal Reporting Format

APPENDIX H - Urban Institute Recommendations to OCD Concerning the Future of Health Start

LIST OF TABLES

Table		Page
II-1	COMPARISON OF HEALTH SERVICES DELIVERED IN SUMMER HEAD START AND IN HEALTH START	II-5
II-2	DESCRIPTION OF FIRST YEAR HEALTH START PROJECTS (with project rankings)	II-8
II-3	CORRELATION OF SELECTED OUTPUT MEASURES WITH VARIOUS INPUT AND PROCESS VARIABLES	II-19
III-1	COORDINATION AND USE OF OUTSIDE RESOURCES	III-13
III-2	CASE STUDIES OF HEALTH START PROJECTS SHOWING % OCD EXPENDITURES AND OUTSIDE RESOURCES USED	III-22
III-3	EXPENDITURE DATA: CENTER, COLORADO	III-23
III-4	ENPENDITURE DATA: FLINT, MICHIGAN	III-24
III-5	EXPENDITURE DATA: HILLSBORO, OREGON	III-26
III-6	EXPENDITURE DATA: ORLANDO, FLORIDA	III-27
III-7	EXPENDITURE DATA: PENOBSCOT, MAINE	III-29
III-8	EXPENDITURE DATA: TULSA, OKLAHOMA	III-30
IV-1	PROBLEMS RELATED TO THE INTERPRETATION OF THE HEALTH START GUIDELINES	IV-2
IV-2	REGIONAL AND IMPD CRITERIA FOR SELECTION OF GRANTEES	IV-8
IV-3	PROGRAM PLANNING AND IMPLEMENTATION SCHEDULE	IV-10
IV-4	PERCENT OF HEALTH START EXPENDITURES FOR PERSONNEL, HEALTH SERVICES AND OTHER COMPONENTS	IV-14
IV-5	END OF YEAR DATA ON STATUS OF CHILDREN REGARDING HEALTH SERVICES	IV-16
IV-6	PERCENT OF CHILDREN IN TOTAL PROGRAM WITH VARIOUS TYPES OF HEALTH EDUCATION	IV-20
IV-7	HEALTH EDUCATION COMPONENTS FOR ALL PROJECTS	IV-21
V-1	ACTUAL/PLANNED ENROLLMENT OF HEALTH START CENTERS BY REGION	V-2
V-2	PLANNED AND ACTUAL COST PER CHILD	V-4

LIST OF TABLES (Cont'd)

Table		Page
V-3	HEALTH SERVICES AND HEALTH EDUCATION PLANNED AND GIVEN	V-6
VI-1	AMERICAN ACADEMY OF PEDIATRICS REPORTS ON HEALTH START PROJECTS	VI-2
VII-1	COST AND PERFORMANCE DATA DISPLAYED FOR ALL PROJECTS	VII-8

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I. INTRODUCTION AND SUMMARY

A. General Background

In the spring of 1971, the Office of Child Development of the U.S. Department of Health, Education, and Welfare launched a demonstration program to build on the health experience in the Head Start program. OCD hoped to learn more about ways to ensure delivery of health services to economically disadvantaged preschool children. A special target group (siblings of Head Start children) was identified, although other economically disadvantaged children from 0 to 6 years of age were also to be served.

The Urban Institute received a grant from the Office of Child Development to answer specific research questions on the effects of the program, on community and project characteristics that affect the success of a project, and on the feasibility of Health Start as an administrative mechanism to ensure provision of health services to economically disadvantaged preschool children. This paper completes the Urban Institute grant requirement to the Office of Child Development.

B. Development of the Health Start Program

Health Start grew out of the success of the health care component of some Head Start projects--and out of recognition that year-round follow-up was necessary to ensure that needed medical and dental treatment would be received by children in whom health problems might be detected through screening and physical examinations. Health Start is based on the Head Start philosophy that "physical and mental well-being can only be promoted through a comprehensive health care program--one that provides for medical,

dental, nutritional, and mental health services, each with preventive, diagnostic, curative, and rehabilitative aspects."[1/]

"A comprehensive program implies a tying together of all the aspects of health care in a mechanism for continuing health supervision. When casefinding services are provided by themselves, as they so often are in community health programs, there is no assurance that curative or rehabilitative services will follow. Similarly, the identification of treatment resources does not in itself guarantee efforts toward casefinding and prevention."[2/] To overcome such fragmentation of health efforts, administrators of local Health Start projects were expected to develop techniques to assure children of continuing health care by coordinating existing resources (funds and/or health services).

In the fall of 1970, Dr. Edward Zigler, then director of the Office of Child Development (OCD), identified the provision of health care to children under school age as high among OCD's priorities and identified summer Head Start as a departure point for an appropriate demonstration program. It was hoped that new methods would be discovered to deliver health services to children in Head Start, that better results could be obtained than from the expenditure of money for short-term summer programs (i.e., improvement of health of a child vs. cognitive changes in a child), and that more children than were presently being served by Head Start would receive health services similar to those provided in the Head Start program. The target number of children to be served in the demonstration was 10,000.[3/]

1/ Gertrude Hunter, "Health Care Through Head Start," Children, July-August 1970, Vol. 17, No. 4, p. 149.

2/ Ibid.

3/ See Head Start Newsletter, Project Head Start, Office of Child Development, Department of Health, Education, and Welfare. Vol. 6, No. 1, April-May, 1971, p.1.

Even though Health Start (or a demonstration health program) was first announced in the fall of 1970 in a speech by Dr. Zigler,[1] the first OCD meeting to plan the operational strategy was not held until January 22, 1971. Several meetings were held in the next month to formalize the plans for the national program. On February 18, 1971, the Health Start guidelines were sent to the Assistant Regional Directors (ARDs) of OCD. The regions were given approximately three weeks to develop regional plans and ten weeks to solicit, review and submit proposals to the national office for final sign-off. Most of the 29 projects were selected by May 5; and in late June some project staffs were hired, a coordinators' conference was held in Washington, D.C., and some projects began operation.[2]

Because of late funding and problems related to project start up, many projects did not begin operation until late July, August or early September, even though the intensive phase of the program was to have been during the summer months.

C. Summary of Health Start Program

Nine thousand nine hundred and forty-five children were enrolled, out of the 10,000 planned to be served. Of those, approximately 48% were white, 27% black, 18% were Spanish-surnamed, 2% were Puerto Rican and 2% were Indian. About 8% of the Health Start children were migrants.

Of the total number of children enrolled in Health Start in the first year, 78% received medical examinations and 42% received dental examinations. Of those tested, 24% needed medical treatment and 56% of those

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1/ Fall meeting of the American Academy of Pediatrics (AAP).
2/ One project, Hammond, Louisiana was allowed to convert from Head Start.

needing medical treatment received it. Of those receiving dental exams, 44% needed dental treatment and of those needing dental treatment only 38% completed the treatment. Costs per child for the total program, health services and personnel varied greatly. Even though there was a correlation between costs and health services provided, it was not high.

D. Sources of Data Used

The Urban Institute identified three major tasks in the evaluation effort: program monitoring, design of the study (which included development of data collection instruments to serve not only evaluation needs but also the needs of health coordinators in administering the program) and evaluation research. The evaluators monitored the projects in order to provide feedback to the Office of Child Development and collect data on project success in mobilizing community, state, and federal resources, and delivering health services and health education. Quarterly reporting data were required from all projects. In addition, a questionnaire about use of Title XIX money was sent to each health coordinator in October 1971. In March 1972 each project was to report program costs (including value of resources used from other sources). At the end of the year summary cost data on major line items were reported by each project. The evaluation efforts were directed at an objective assessment of the impact of the Health Start program as well as at the relative effectiveness of approaches taken in different Health Start projects.

1. Reporting System Forms and Evaluation Handbook

By June 21, both the forms and procedures for a quarterly reporting system had been prepared by the Institute along with material for training the health coordinators on the purposes and method of the evaluation. During the health coordinators' conference, June 21 - 25,

the reporting system was reviewed with the health coordinators and then revised and issued along with instructions in a Health Start Evaluation Handbook on July 9. This reporting system was operated successfully in the field.

2. Start-up Interviews

A series of telephone interviews with all health coordinators was carried out to confirm project data and timing, to review reporting requirements, to discover start-up problems and assistance needed. OCD regional office staffs were informed of the dates of the Health Start site visits in their respective regions. Problems found in the field were relayed to the headquarters staff or to appropriate regional staffs.

3. Site Visits

A review was made of all proposals and grants and a data collection format was designed for use in site visits.[1/] Data were collected at each site on local background, the planning process, the process of service delivery, follow-up, use of consultants, organizational structure, actual use of the grant funds, health education, background of the staff, and parent participation.

Site visits were made principally by two-man teams of Urban Institute staff who spent two days at each project location. As requested by OCD, the evaluators made early visits as well as visits following the intensive phase of a project. Most visits were made during the intensive phase. Visits both during and after the intensive phase of a project seem to have countervailing advantages and disadvantages. Early visits proved to be

PS 003004

1/ Appendix D.

more a form of technical assistance to the project than evaluation. For some sites a one-person monitoring visit was tried; however, it was concluded that the workload involved in collecting and verifying all of the data required was too heavy for one person.

Several of the coordinators felt that the detail and structure of the monitoring format aided in planning for the remainder of the program.

4. Medicaid Questionnaire

On October 15, 1971 a questionnaire concerning Medicaid assistance was sent to each project. Preliminary results were made available to OCD and the final results are included in Appendix C of this report.

5. Fiscal Reporting System

In March 1972, a letter requesting OCD grant expenditure data and value of "coordinated resources" was sent to the health coordinators. Few projects were able to retrieve specific data on outside resources they used--either of costs or units of service. For this reason we were only able to present relatively complete cost data for six projects. Most of the cost analysis was based on end of the year reports on OCD grant expenditures (for major line items).

E. Major Conclusions and Recommendations

The first year Health Start projects varied widely in funding levels; children planned to be served; per child costs for health services, personnel and the total program; number of children enrolled; approaches taken in detection of health problems; amount of outside resources used; type and amount of health education given; and success in ensuring delivery of health services to the children enrolled. In the

interim evaluation report and on subsequent occasions, the Urban Institute has encouraged OCD to structure the Health Start program in such a way as to test hypotheses concerning various approaches taken in the first year program. We still endorse this action if a third year Health Start program is planned. Data from the first (and second) year programs could be used as the basis for the development of models for the third year program.

The administrative structure of the first year program was weak, with no real accountability at the national or regional level. The headquarters staff prepared the guidelines, and then through the year, interpreted them; and the regions selected and funded the projects. The existence of a national Health Start director for the Health Start program (for the second year) and more direct involvement of the regional office staffs should help the operation of the second year program.

Cost data from the first year program have revealed that the approximate cost for a Health Start program (including all required components) was approximately $200 per child. If a third year program is to be planned, OCD should ensure that planned costs (including use of outside resources) be approximately $200 per child. This could ensure that more children receive all treatment which is found to be necessary to improve their health status.

F. Overview of the Report

Chapter II addresses the evaluation results and methodological issues related to the first year Health Start program. Chapter III describes Health Starts progress in meeting the program objectives; Chapter IV addresses the guideline requirements; Chapter V shows projects planned

and the actual performance of individual Health Start projects. Technical assistance offered to the projects is addressed in Chapter VI; and major conclusions and recommendations are presented in Chapter VII.

II. EVALUATION RESULTS AND METHODOLOGICAL ISSUES RELATED TO THE EVALUATION OF THE FIRST-YEAR HEALTH START PROGRAM

This chapter presents some evaluation results and discusses methodological issues related to the evaluation questions posed in the Urban Institute proposal for evaluation of the first year Health Start program and in the "Highlight Memorandum" that signified the conditions of the OCD grant to the Institute. This report and past Institute communications emphasize that, for many of the questions, definitive answers could not be obtained in the first year evaluation. This chapter discusses the Institute approach to answering the questions in the first year evaluation and factors limiting the extent of the first year analysis. Some tentative conclusions are presented about the impact of the program, and community and project characteristics that are related to project performance. Plans for fuller data collection and more definitive analysis in the second year of Health Start are described. Finally, a proposal is made for a "planned-variation" approach for a third year program that would yield much more definitive answers to a limited number of questions about the effectiveness of Health Start operations.

Our discussion is divided into two parts: (A) overall Health Start program impact, (B) relationship of Health Start project results to community and project characteristics.

A. Health Start Program Impact

1. Are Health Start Projects Having Incremental Effects on Health Services for Children?

a. Urban Institute Approach

The data to answer this question were generated through the quarterly reporting system[1/] developed by the Institute to record health services delivered to each child enrolled in Health Start. With good project compliance in reporting, we believe that our estimates of health services delivered are quite accurate.

However, without the control groups considered initially but not included in the first year evaluation of Health Start, it is difficult to estimate precisely the incremental effects of Health Start on health services for children. In many areas served by Health Start projects, because of limited resources and/or an unserved population, a good first approximation would be that all the services delivered by Health Start are incremental, i.e., the health services given probably would not have been provided in the absence of Health Start.

In some of the Health Start projects, children were subsequently enrolled in Head Start. In those cases, Health Start health services to such children are incremental only to the extent that the related Head Start projects would not provide health services equivalent to those offered in Health Start.

All things considered, especially in view of the rather limited local budgets and systems for delivery of health services to economically deprived preschool children, it is reasonable to estimate the incremental effects of Health Start as about equal to the total amount of health services delivered by Health Start. With local resources limited, there seems to be little duplication of Health Start and non-Health Start services.

1/ See Appendix D.

In lieu of a control group, health services data from the 1968 summer Head Start program were used as a comparison of the incremental effects of Health Start both on health services delivered and on the health status of the children enrolled.[1/] Comparison was made between the 1968 Head Start data and Health Start data even though there were collection and reporting problems. Two other sources of Head Start data exist, but were not used because the data were not comparable with Health Start.[2/]

b. Conclusions

(1) The average Health Start project enrolled 96% of planned enrollment, tested 67% of the children enrolled (average of seven required tests), found 13% of the children tested needing treatment (average of seven tests), completed treatment on 37% of the children enrolled (total of seven tests), and met Health Start project guidelines by examining and completing all necessary medical treatment for 63% of the children enrolled (average of seven tests).[3/]

(2) In planning the Health Start program, OCD expected that the quality of the health services delivered would be at least as good in Health Start as in summer Head Start and that a full-year program would provide the time necessary to complete more of the follow-up care needed to correct health problems discovered through the medical and dental examinations and screening tests. Available data on the summer

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1/ Thomas F. Sullivan, et al. Analysis and Statistics Based On End Of Program Report Head Start Health Services. Cambridge: Bio-Dynamics, June 20, 1969.

2/ The two sources are: "Bureau of Census Data on a Sample of Full Year and Summer Head Starts, 1968." Washington: Office of Child Development, October 1970. Evaluations of War on Poverty: Analysis of CAP MIS Data. Bethesda, Maryland: Resource Management Corp., Vol. II, November 13, 1968.

3/ See p. II-8.

Head Start program do not confirm this expectation, although the quality of available Head Start data does leave a good deal to be desired. A Bio-Dynamics report on the 1968 summer Head Start program, based on "usable" data from 62% of the projects (collected at the end of the year in summary form) indicate summer Head Start performance superior to Health Start performance on all but one of the measures displayed in Table II-1. Bio-Dynamics reported that, "Because some reporting programs completed sections of the form with contradictory data or in an unclear manner it was necessary to establish very specific and precise criteria for data acceptability prior to processing the forms." Because the Urban Institute monitored each Health Start project, collected data on a child-by-child basis and checked discrepancies in reporting through the year, we have high confidence that our data accurately reflect the performance of Health Start projects. We do not have the same confidence in the Head Start data. Therefore, a comparison of Head Start health service performance with Health Start performance could lead to erroneous conclusions about the success of the Health Start program.

c. Year Two Evaluation Plan

The methods used in the first year of Health Start are sufficient to yield reasonable estimates of the health services delivered by Health Start.

Our data collection and analysis plans for Year Two will provide better indication of the incremental effects of Health Start on delivery of needed health services:

(i) As baseline data, we will collect information on the types and amount of health services received by Health Start children in the year preceding their enrollment in Health Start.

TABLE II-1

COMPARISONS OF HEALTH SERVICES DELIVERED IN SUMMER HEAD START AND IN HEALTH START

	1968 Summer Head Start [3]	1971-1972 Health Start
HEARING		
% Tested	74	58
% With Abnormal Tests[1]	5	6
% Completing Needed Treatment[2]	40	27
VISION		
% Tested	83	60
% With Abnormal Test	8	6
% Completing Needed Treatment	50	37
MEDICAL		
% Tested	83	78
% With Abnormal Test	25	24
% Completing Needed Treatment	58	56
DENTAL		
% Tested	77	62
% With Abnormal Test	62	44
% Completing Needed Treatment	43	38

[1] [(Number with Abnormal Test)/(Number Tested)] x 100

[2] [(Number Completing Required Treatment)/(Number with Abnormal Test)] x 100

[3] Thomas F. Sullivan et al. Analysis and Statistics Based on the End of Program Report Head Start Health Services. Cambridge: Bio-Dynamics, June 20, 1969.

(2) In addition, our second year evaluation plan includes collection of comparable data on the health care components of Head Start projects.[1/]

2. Are Health Start Projects Having Incremental Effects on Children's Health Status?

a. Urban Institute Approach

The methodology used in the first year evaluation seems sufficient to get reasonably good estimates of the effects of Health Start on the health status of the children enrolled.

b. Conclusions

In view of rather limited local budgets and systems for delivery of health services to economically deprived preschool children, it is reasonable to estimate Health Start effects on children's health status as about equal to the number of treatments completed after need for such treatment was revealed in the screening tests.

c. Year Two Evaluation Plan

Although data on tests administered, treatment needed, and treatment begun and completed were systematically reported, Health Start projects failed to indicate consistently the types of medical problems found (e.g., amblyopia, orthopedic problems, neurological dysfunctions). The quarterly health reports for the second year evaluation specify recording of health problems found as well as the severity of the conditions.

1/ Garth N. Buchanan and Leona M. Vogt, Health Start Analysis Plan for Second Program Year (second revision), Urban Institute Working Paper 964-2, August 1972.

B. Relative Effectiveness Evaluation: How Are Health Start Project Results Related To Community Characteristics? To Characteristics of Pre-Existing Medical Services? To Project Characteristics?

1. Overall Project Results

Table II-2 summarizes much of the available information on Health Start projects, presenting the values of (and relative project rankings on) variables representing potentially important community characteristics (including availability of health care resources), project characteristics, and project results.

In attempting to answer questions on the relationship of community characteristics and project characteristics to project results, we used the following six indicators of project results:

(1) Project enrollment as a proportion of planned enrollment [enrolled/planned],

(2) Proportion of enrolled children who completed examinations and screening tests [tested/enrolled] (average of seven tests required under Health Start guidelines),

(3) Proportion of children tested for whom treatment was needed [needing treatment/tested] (average of seven tests required under Health Start guidelines),[1/]

(4) Proportion of the children needing treatment who completed needed treatment [(completed treatment)/(needing treatment)] (average of seven tests required under Health Start guidelines),

(5) Proportion of the children enrolled who completed needed treatment [(completed treatment)/(enrolled)] (average of seven tests required under Health Start guidelines), and

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1/ This variable may be an indicator of thoroughness of testing.

PROJECT #	COMMUNITY CHARACTERISTICS											
	CC- 1	CC-2	CC-3	CC-4	CC-5	CC-6	PC-0	PC-1	PC-2	PC-3	PC-4	PC-5
	Urban Rural Mixed	% Migrant	Local Resources Available	Community Support	% Needing Treatment (R,RB,R/OK) Tested	% Drops from Program	Coordinators' Background	Planned Cost/ Child	OCD Cost per Child Total	OCD Cost for Child Personnel	OCD Cost per Child Health Services	OCD Cost per Child Other
1	Rural	0	Few	Not Supportive	28 (1)	7 (14)	RN	$320 (1)	$225.98 (3)	$119.22 (3)	$80.78 (4)	$25.98
2	Rural	0	Few	Not Supportive	14 (13)	1 (23)	PHN	111 (19)	102.23 (17)	40.40 (18)	36.23 (16)	25.60
3	Urban	0	Many	Supportive?	6 (24)	0 (27)	PHN	24 (28)	21.67 (29)	12.45 (25)	2.02 (29)	7.20
4	Rural	0	Some	Normal	11 (18.5)	0 (27)	RN	77 (23)	81.16 (22)	.00 (29)	57.06 (8)	24.10
5	Urban	0	Many	Normal	21 (3.5)	0 (27)	PHN	167 (10.5)	217.12 (4)	104.51 (4)	50.43 (9)	62.18
6	Mixed	29	Some	Normal	12 (15.5)	9 (11)	RN	250 (6.5)	242.96 (1)	100.76 (7)	93.21 (2)	48.99
7	Urban	0	Many	Supportive	18 (8)	2 (20)	RN	196 (9)	121.88 (14)	49.49 (16)	57.16 (7)	15.23
8	Mixed	0	Many/Few*	Supportive & not support*	22 (2)	6 (15.5)	PHN	144 (12)	120.61 (15)	8.89 (27)	91.29 (3)	20.43
9	Rural	0	Many	Supportive	20 (5.5)	2 (20)	PHN	133 (15.5)	134.57 (11)	48.78 (17)	63.38 (6)	22.41
10	Rural	19	Many	Supportive	20 (5.5)	16 (9)	PHN	254 (4)	199.76 (5)	140.06 (2)	38.81 (13)	20.89
11	Rural	0	Few	Not Supportive	10 (20.5)	17 (8)	RN	133 (15.5)	120.06 (16)	50.91 (15)	32.56 (19)	36.59
12	Rural	24	Some	Not Supportive?	15 (12)	0 (27)	Other	79 (22)	74.93 (24)	27.28 (21)	26.32 (21)	19.33
13	Urban	9	Some	Not Supportive	10 (20.5)	2 (20)	Other	125 (17.5)	125.73 (13)	30.85 (19)	65.02 (5)	29.86
14	Urban	0	Many	Normal	9 (22)	24 (5)	RN	75 (24)	39.41 (27)	9.82 (26)	29.23 (20)	.36
15	Urban	0	Some+	Supportive	2 (28.5)	4 (18)	Other	139 (13.5)	76.12 (23)	23.27 (22)	46.13 (11)	6.72
16	Rural	86	Some	Not Supportive	3 (27)	18 (7)	RN	250 (6.5)	226.29 (2)	189.89 (1)	9.69 (26)	26.71
17	Urban	0	Many	Supportive	17 (10.5)	6 (15.5)	PHN	139 (13.5)	93.48 (20)	51.27 (14)	33.36 (18)	8.85
18	Rural	17	Some	Not Supportive	6 (24)	21 (6)	PHN	259 (3)	130.48 (12)	72.38 (10)	47.48 (10)	10.62
19	Rural	9	Some	Normal?	17 (10.5)	26 (4)	RN	125 (17.5)	136.68 (10)	102.30 (5)	6.08 (28)	28.30
20	Rural	0	Some	Supportive?	21 (3.5)	1 (23)	PHN	167 (10.5)	199.15 (6)	59.34 (13)	135.60 (1)	4.21
21	Rural	1	Some	Not Supportive	12 (15.5)	8 (12.5)	Other	50 (26)	93.64 (19)	66.52 (12)	7.52 (27)	19.60
22	Rural	0	Some	Normal	11 (18.5)	1 (23)	PHN	253 (5)	137.59 (9)	67.81 (11)	26.26 (22)	43.52
23	Mixed	20	Some	Normal	18 (8)	28 (3)	RN	216 (8)	166.49 (7)	88.92 (8)	36.49 (15)	41.08
24	Urban	31	Some	Supportive	18 (8)	44 (1)	RN	109 (20)	22.89 (28)	2.01 (28)	17.68 (24)	3.20
25	Urban?	0	Few	Not Supportive	2 (28.5)	31 (2)	Other	261 (2)	155.63 (8)	101.34 (6)	40.24 (12)	14.05
26	Urban	0	Many	Very Supportive	5 (26)	0 (27)	Other	67 (25)	97.14 (18)	84.88 (9)	11.30 (25)	.96
27	Rural	0	Some	Normal	6 (24)	13 (10)	Other	84 (21)	62.60 (25)	19.97 (23)	35.58 (17)	7.04
28	Rural	1	Few	Normal	12 (15.5)	8 (12.5)	Other	49 (27)	44.35 (26)	14.90 (24)	20.84 (23)	8.61
29	Rural	100	Many	Supportive	12 (15.5)	5 (17)	RN	22 (29)	92.90 (21)	29.73 (20)	37.42 (14)	25.75
PROJECT MEAN		12%			13%	10%		$149	$123	$59	$43	$21

* Project serves two different types of communities.

TABLE II-2

DESCRIPTION OF FIRST YEAR HEALTH START PROJECTS

(with project rankings)

PROJECT CHARACTERISTICS

	PC-5	PC-6	PC-7	PC-8	PC-9	PC-10	PC-11	PC-12	PC-13	PC-14
	OCD Cost per Child Other	Community Support "Coordinated"	Children per Staff Member	Type Grantee	% Grant Unexpended	% Enrolled / Planned	Grant Size	# Children Planned	# Children Enrolled	"Administrative Skills"
)	$25.98 (9)	Some+	10.4 (21)	CAP	0 (27.5)	142 (3)	40,000 (8)	125 (25)	177 (19)	A+
)	25.60 (11)	High	18.8 (17)	CAP	.002 (25)	108 (11.5)	25,000 (21.5)	225 (13.5)	244 (14)	A-
)	7.20 (23)	High	100.3 (4)	P.H.D.	19 (13)	90 (19)	48,000 (4)	2000 (1)	1806 (1)	A-
)	24.10 (12)	Some	34.2 (11)	CAP	0 (27.5)	95 (17)	25,000 (21.5)	325 (10.5)	308 (10)	A-
)	62.18 (1)	Some	5.1 (28)	CAP	4 (18.5)	74 (23)	251,000 (1)	1500 (3)	1112 (2)	A-
)	48.99 (2)	Low	7.7 (25)	CAP	3 (20.5)	100 (14)	25,000 (21.5)	100 (28)	100 (29)	B
)	15.23 (18)	High	5.6 (26)	CAP	44 (5.5)	89 (20)	29,400 (16)	150 (22.5)	134 (24)	B
)	20.43 (15)	High/Low	258.0 (1)	CAP	0 (27.5)	149 (2)	75,000 (2)	520 (7)	774 (3)	A/F
)	22.41 (13)	High	28.3 (15)	CAP	11 (17)	88 (21)	30,000 (15)	225 (13.5)	198 (16)	B+
)	20.89 (14)	Some+	33.2 (12)	P.H.D.	13 (15.5)	110 (9)	38,100 (11)	150 (22.5)	166 (20)	B+
)	36.59 (5)	Low	72.5 (5)	CAP	13 (15.5)	97 (16)	20,000 (29)	150 (22.5)	145 (21)	B
)	19.33 (17)	High	51.3 (6)	CAP	61 (2)	41 (27)	39,700 (10)	500 (9)	205 (15)	C
)	29.86 (6)	Low	3.4 (29)	CAP	1 (22.5)	98 (15)	25,000 (21.5)	200 (18)	196 (17)	A
)	.36 (29)	Low	48.9 (7)	CAP	40 (7)	114 (7)	45,000 (6)	600 (5.5)	685 (4)	C
)	6.72 (25)	Low	15.1 (19)	Med.Sch.	59 (3)	75 (22)	25,000 (21.5)	180 (20)	136 (23)	D-
)	26.71 (8)	Low	5.5 (27)	CAP	.004 (24)	110 (9)	25,000 (21.5)	100 (28)	110 (28)	C
)	8.85 (21)	High	44.0 (9)	CAP	27 (10)	108 (11.5)	45,200 (5)	325 (10.5)	352 (9)	B
)	10.62 (20)	Low	35.1 (10)	St.Coll.	44 (5.5)	110 (9)	57,500 (3)	222 (15)	246 (13)	C
)	28.30 (7)	Some+	46.7 (8)	CAP	23 (11)	70 (24)	25,000 (21.5)	200 (18)	140 (22)	B
)	4.21 (26)	High	29.5 (13.5)	CAP	33 (8)	56 (25)	35,000 (14)	210 (16)	118 (25.5)	C
)	19.60 (16)	Some	15.7 (18)	CAP	1 (22.5)	52 (26)	37,500 (13)	750 (4)	393 (7)	B
)	43.52 (3)	High	9.8 (22)	CAP	3 (20.5)	177 (1)	37,900 (12)	150 (22.5)	265 (12)	A
)	41.08 (4)	Low	29.5 (13.5)	CAP	21 (12)	103 (13)	24,800 (26)	115 (26)	118 (25.5)	B
)	3.20 (27)	Low	9.3 (24)	CAP	72 (1)	135 (4)	21,800 (28)	200 (18)	270 (11)	B-
)	14.05 (19)	Some	23.2 (16)	Sch.Sys.	31 (9)	116 (6)	26,100 (17)	100 (28)	116 (27)	C
)	.96 (28)	Some	9.7 (23)	CAP	55 (4)	31 (28)	40,000 (8)	600 (5.5)	185 (18)	F
)	7.04 (24)	Low	120.3 (3)	CAP	0 (27.5)	134 (5)	22,600 (27)	270 (12)	361 (8)	D+
)	8.61 (22)	Some	14.3 (20)	CAP	16 (14)	92 (18)	25,000 (21.5)	514 (8)	473 (5)	B
)	25.75 (10)	High	206 (2)	CAP	4 (18.5)	23 (29)	40,000 (8)	1800 (2)	412 (6)	D-
	$21		45		21%	96%	$42,000	431	342	

OUTPUT MEASURES

0-1		0-2		0-3		0-4		0-5		$0\text{-}5_m$		$0\text{-}5_d$		0-6		PROJECT #
% Enrolled / Planned		% Tested (OK,R,RB,R/OK) / Enrolled		% Needing Treatment (R,RB,R/OK) / Tested		% Treatment Completed (R/OK) / Needing Treatment		% Treatment Completed (R/OK) / Enrolled		% Medical Treatment Completed (R/OK) / Enrolled		% Dental Treatment Completed (R/OK) / Enrolled		% Completed (TY,OK,R/OK) / Enrolled		
142	(3)	102	(1)	28	(1)	95	(2)	146	(1)	63	(1)	59	(2)	95	(1.5)	1
108	(11.5)	99	(2.5)	14	(13)	66	(14)	52	(9)	14	(17)	0	(25)	95	(1.5)	2
90	(19)	99	(2.5)	6	(24)	No data		No data		No data		No data		93	(3)	3
95	(17)	97	(4)	11	(18.5)	69	(13)	48	(10)	18	(3)	10	(13.5)	90	(5)	4
74	(23)	93	(5)	21	(3.5)	43	(22.5)	59	(7)	42	(2)	4	(19)	82	(7)	5
100	(14)	92	(6)	12	(15.5)	88	(3)	60	(6)	6	(15)	52	(3)	91	(4)	6
89	(20)	86	(7)	18	(8)	74	(9.5)	65	(5)	0	(26)	43	(4)	83	(6)	7
149	(2)	85	(8)	22	(2)	14	(27)	13	(20)	9	(12.5)	4	(19)	61	(15)	8
88	(21)	83	(9)	20	(5.5)	87	(4)	101	(2)	15	(5.5)	76	(1)	81	(8)	9
110	(9)	81	(10)	20	(5.5)	71	(11)	75	(3)	9	(12.5)	35	(5.5)	77	(9)	10
97	(16)	79	(11)	10	(20.5)	74	(9.5)	38	(11)	9	(12.5)	11	(11.5)	70	(11)	11
41	(27)	78	(12)	15	(12)	46	(20)	25	(17)	4	(17.5)	8	(17)	54	(20)	12
98	(15)	73	(13)	10	(20.5)	70	(12)	37	(12)	4	(17.5)	21	(8)	71	(10)	13
114	(7)	66	(14)	9	(22)	76	(7.5)	28	(16)	11	(9)	14	(10)	68	(12)	14
75	(22)	65	(15.5)	2	(28.5)	50	(18)	4	(26)	3	(19.5)	0	(25)	64	(13)	15
110	(9)	65	(15.5)	3	(27)	19	(26)	3	(27)	0	(26)	0	(25)	59	(18)	16
108	(11.5)	64	(17)	17	(10.5)	76	(7.5)	57	(8)	9	(12.5)	35	(5.5)	62	(14)	17
110	(9)	61	(18)	6	(24)	59	(16)	9	(22)	0	(26)	0	(25)	60	(16.5)	18
70	(24)	59	(19)	17	(10.5)	49	(19)	30	(15)	17	(4)	9	(15.5)	60	(16.5)	19
56	(25)	58	(20)	21	(3.5)	83	(5)	69	(4)	15	(5.5)	32	(7)	56	(19)	20
52	(26)	56	(21)	12	(15.5)	36	(24)	15	(18.5)	3	(19.5)	4	(19)	52	(21)	21
177	(1)	48	(22)	11	(18.5)	79	(6)	32	(13)	10	(10)	10	(13.5)	49	(22)	22
103	(13)	47	(23)	18	(8)	63	(15)	31	(14)	12	(8)	17	(9)	44	(23)	23
135	(4)	45	(24)	18	(8)	30	(25)	15	(18.5)	2	(21.5)	11	(11.5)	40	(26)	24
116	(6)	44	(25)	2	(28.5)	0	(28)	0	(28)	0	(26)	0	(25)	43	(24)	25
31	(28)	43	(26)	5	(26)	54	(17)	7	(25)	0	(26)	0	(25)	42	(25)	26
134	(5)	27	(27)	6	(24)	97	(1)	10	(21)	1	(23)	9	(15.5)	30	(27)	27
92	(18)	24	(28)	12	(15.5)	44	(21)	8	(23.5)	2	(21.5)	1	(21)	22	(28)	28
23	(29)	20	(29)	12	(15.5)	43	(22.5)	8	(23.5)	5	(16)	0	(25)	19	(29)	29
96%		67%		13%		59%		37%		10%		17%		63%		

(6) Proportion of children enrolled who completed all health service requirements in Health Start guidelines [(tested and needed no treatment + too young to be tested + needed treatment and completed treatment)/(enrolled)] (average of seven tests required under Health Start guidelines).

In this section we use the term "project results" to indicate project output on all six of the variables (giving equal weight to values of any of the six output variables that were more than 33% above or below the project mean value for that variable). Statistical tests were not run, but the data are presented as suggesting possible trends.

We also present the results of special analyses related to variable (5) "proportion of children enrolled who completed needed treatment," since this is a useful single summary measure of the health services delivered by Health Start. We also report the results of sub-analyses relating community characteristics and project characteristics to two output variables included in variable (5):

(5_m) proportion of children enrolled who completed needed medical treatment [(completed medical treatment)/(enrolled)], and

(5_d) proportion of children enrolled who completed needed dental treatment [(completed dental treatment)/(enrolled)].

a. How Are Health Start Project Results Related to Community Characteristics? To Characteristics of Pre-Existing Medical Services?

(1) Urban Institute Approach

We examined the effects of four "community characteristics" on Health Start project results in Year One:

(a) geographic location (urban/rural/mixed),

(b) proportion of children who are from migrant families,

(c) an estimate of the local resources available for delivering health services, and

(d) an estimate of the amount of "community support" for delivery of health services to disadvantaged children.

(2) Conclusions

Of these four variables, only variable (b) "proportion of children who are from migrant families" showed some indication of being related to Health Start project results.

(a) Geographic Location (Urban/Rural/Mixed)

Geographic location was not related to Health Start project results. Relatively effective and relatively ineffective projects were well distributed among both the urban projects and the rural projects.

(b) Proportion of Children Who Are From Migrant Families

The two Health Start projects which had high proportions of migrant children were among the four Health Start projects with the poorest overall project results.

In particular, both migrant projects ranked very low[1/] in the proportion of children enrolled who actually completed treatment [(completed treatment)/enrolled]. One of the two migrant projects had the worst record of any Health Start project in completing the testing (screening) part of the program; the other migrant project ranked very low[2/] in

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1/ Twenty-third and 27th out of the 28 projects for which treatment data were available.

2/ Twenty-sixth out of the 28 projects for which treatment data were available.

completing treatment of those children for whom treatment was needed [(completed treatment)/required treatment].

In particular, the two projects serving predominantly migrant populations ranked low on completing medical treatment (0% and 5% of the children enrolled in these two projects completed medical treatment, in comparison with a project average of 10%) and ranked last on completing dental treatment (none of the children enrolled in these two projects completed dental treatment in comparison with a project average of 17%).

(c) Estimates of Local Resources Available for Delivering Health Services;
(d) Estimates of the Amount of "Community Support" for Delivery of Health Services to Disadvantaged Children

Neither of the variables (c) "Local Resources Available" or (d) "Community Support" were related to Health Start overall project results.[1/] Part of the problem here may have been inadequacy of data to measure these variables.

(3) Year Two Evaluation Plan

Our data collection and analysis plan for Year Two will provide more and better information on both (c) "health care resources available" and (d) "community support for delivery of health services to disadvantaged children." With more accurate information on these variables, it is possible that effects of such variables may be detected.

It is still likely that the Year Two evaluation will be unable to detect the effects of such variables, which could be detected, however,

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1/ In one of the sub-analyses, among projects having a nurse as health coordinator and not serving predominantly migrant children, a combination of (c) many local resources available and (d) high community support implied significantly greater output: the four projects with both these characteristics were among the top projects in proportion of children completing dental treatment.

in a planned variation design which would assign similar types of projects to areas with (for example) greater or lesser local resources available.

b. How Are Health Start Project Results Related to Project Characteristics?

(1) Urban Institute Approach

We examined the effects of fourteen "project characteristics" on Health Start project results in Year One: (1) coordinator's background (public health nurse/nurse/other), (2) planned cost per child, (3) cost per child, (4) cost per child for personnel, (5) cost per child for health services, (6) other costs per child, (7) other resources "coordinated" (i.e., obtained at no cost to OCD), (8) children per staff member, (9) grant size, (10) type of grantee, (11) proportion of Health Start grant unexpended, (12) an estimate of the "administrative skill" of project personnel, (13) enrollment as a percentage of planned enrollment, and (14) proportion of those tested who were said to need treatment (a possible indicator of thoroughness of testing). (The last two variables can also be thought of as output variables. In some of our analyses, we have used variables (13) and (14) as output variables).

(2) Conclusions

Of these fourteen variables, only (1) "coordinator's background," (5) "cost per child for health services," (12) "administrative skills," and (14) "proportion needing treatment" showed some indication of being related to Health Start results.

(a) Coordinator's Background (Public Health Nurse/Nurse/Other)

Seven of the eight projects which did not

have a nurse as health coordinator had consistently poorer overall project results than the other 21 projects.[1/]

In particular, of the eight projects not having a nurse as health coordinator, only 0% to 4% of the children enrolled completed medical treatment (in comparison with a project average of 10%); in seven of these eight projects, only 0% to 9% of the children enrolled completed dental treatment (in comparison with a project average of 17%).

(b) Costs

In general, projects with higher costs per child had better results.

Of the seven projects with significantly higher total expenditures per child (at least 33% above average), five were among the eight projects with the best overall project results.[2/]

(c) Costs Per Child for Health Services

Of the eight projects with significantly higher expenditures for health services (at least 33% above average), five were among the nine projects with best overall results and these five were among the six projects which completed the most treatment in comparison with enrollment. On the other hand, of the nine projects with significantly lower expenditures for health services, five had generally poor results and a sixth supplied no data on treatment provided.

1/ Project #13 was the one exception: a project which did not have a nurse as health coordinator but which spent $65/child for health services (fifth highest) and was given high marks on our estimate of the "administrative skill" of project personnel.

2/ A notable exception was Project #16, which had the second highest expenditures but ranked in the bottom three projects in % needing treatment, % treated/needing treatment, and % treated/enrolled.

Further, on the projects not having a nurse as health coordinator, only the project ranked high on health service expenditures (Project # 13) had close to average results. The other seven projects not having a nurse as health coordinator had poor results.

Our data collection and analysis plan for Year Two will provide considerably more information on "resources coordinated" (not paid for out of Health Start funds). Such information should make it possible to develop better estimates of the costs of delivering needed health services to economically disadvantaged preschool children.

Of the projects having a nurse as health coordinator and not serving predominantly migrant children, higher health services expenditures tended to be related to high proportions of children enrolled who completed medical treatment, but there were many exceptions.

Of the projects having a nurse as health coordinator and not serving predominantly migrant children, higher expenditures on health services were related to greater completion of dental treatment: of eight projects with health services expenditures at least 33% above the project mean, six ranked in the top seven on proportion of children enrolled who completed dental treatment.

(d) Grant Size

Only one project, Project #5 (the converted summer Head Start project), had a significantly higher grant ($251,000 vs. an average grant of $42,000). This project had generally good results: ranking high on percent tested, percent needing treatment, and percent treated/enrolled. Except for problems in completing needed dental

treatment when funds ran out, this project's results would have been even more outstanding.

From a sample of one project, however, we are reluctant to draw conclusions.

(e) Administrative Skill

Based on our assessments at the time of the site visits and the ability of the projects in retrieving and reporting data, the Urban Institute attempted to estimate the "administrative skills" of local project personnel.[1/] The four projects given the lowest grades all ranged in the bottom eight projects, both in overall project results and in percent completing treatment/enrolled.[2/] The seven projects receiving "A" grades on "administrative skills" had generally good but not spectacular results (ranking 1,3,6,7,10,11,13, on overall results and 1,7,9,10,12,13, no data), on percent completing treatment/enrolled.

Of the projects not having a nurse as health coordinator, only that project marked "A" on "administrative skill" (Project #13), had close to average results. The other seven not having a nurse as health coordinator had poor results.

(f) Proportion Needing Treatment

Of the nine projects with significantly higher "% needing treatment" (a possible indicator of the thoroughness of the testing program), six projects ranked among the top nine in terms of overall project results and among the top seven in numbers treated/enrolled. On the other hand, of the seven projects with significantly lower percent

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1/ These "administrative skills" ratings were given without raters having seen project output data.

2/ Only one of these four had a nurse as health coordinator.

needing treatment, six ranked in the bottom ten projects in terms of overall results, and the seventh supplied no data on treatment provided.

For the projects not having nurses as health coordinator, this variable does not seem to have a strong effect on other project results. On the other hand, for projects having a nurse as health coordinator, this variable predicts other project results quite well. Among the nine projects ranking high on this variable all but three had relatively good results.

Of the projects having a nurse as health coordinator and not serving predominantly migrant children, the variable "proportion of children examined who needed treatment" was the strongest predictor of output in terms of numbers of children completing medical treatment.

(g) Summary

In summary, the following variables appear to have had some relation to successful Health Start project performance in Year One: presence of a nurse as health coordinator, high expenditures per child for health services, and competent project administration. In addition, higher "proportions of children needing treatment" (a possible indicator of thoroughness in testing) was related to better project results. Only one community characteristic, proportion of children from migrant families, seemed to result in poorer project performance in providing health services to the children enrolled.

2. Correlation of Individual Output Measures with Selected Input and Process Variables

Another approach used by the Institute to analyze the project success in providing the required health services was to compute rank

correlation coefficients between individual output measures and various input and process variables expected to affect project performance. (Appendix D presents the plots for the variables discussed below.)

Two health service output measures were used: (1) percent of children enrolled who received all the required tests and (2) percent of children enrolled who met the health service guideline requirements (i.e., received all required tests if not too young and completed treatment if found in need of health care). The input and process variables used were related to costs, treatment needed and size of project: (1) per child expenditures for the total program, (2) per child expenditures for personnel, (3) per child expenditures for health services, (4) grant size, (5) amount of unexpended funds, (6) treatment needed and number of children enrolled. Rank correlations were run on 28 projects; Hammond (the converted Head Start) was excluded from this analysis because its cost data were so dissimilar from the other Health Start projects.

a. Costs

Hypothesis #1: Projects with high amounts of outside resources "coordinated" (i.e., obtained at no cost to OCD) should have lower per child costs for health services and the total program than projects using little or no outside resources. Therefore, we might expect to find no correlation between OCD costs of health services (and total OCD costs) and the two health service output measures.

Conclusion: Costs, whether for the total program or for health services, have significant[1/], but not high, correlations with health services given. This probably means that projects did not use many outside resources. Some degree of "coordination" must have existed in some of the projects, however, otherwise there would have been higher positive correlations between the two cost variables and the two health service output measures.

Table II-3 shows that -

- the OCD per child costs for health services[2/] has a significant positive correlation with health services given, i.e., percent tested (ρ= +.3)[3/] and percent meeting health service guideline requirements (ρ= +.4).[4/]
- the OCD per child costs for the total program[2/] has a significant positive correlation with the percent of the children meeting the health services guideline requirements (ρ= +.2)[5/] but no significant correlation with the percent of children tested (ρ= +.04).

Hypothesis #2: The higher the percentages of children receiving health services, the more grant money will be expended by the project.

Conclusion: There was a significant negative correlation between the amount of the grant that was unexpended and the percent of

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1/ At .05 level of confidence.
2/ Health Start grant expenditure
3/ See Figure E-1 in Appendix E for plots of these variables.
4/ See Figure E-2 in Appendix E.
5/ See Figure E-3 in Appendix E.

TABLE II-3

CORRELATION OF SELECTED OUTPUT MEASURES
WITH VARIOUS INPUT AND PROCESS VARIABLES

Positive Correlation (ρ= +.20 or Greater)[1/]	Negative Correlation (ρ= -.20 or Less)[1/]	Low Correlation (ρ= between -.19 and +.19)[1/]
% tested and % needing treatment (+.6)	% tested and grant funds unexpended (-.2)	% tested and personnel cost/child (+.03)
% meeting health services guideline requirements and % needing treatment (+.7)	% meeting health services guideline requirements and grant funds unexpended (-.2)	% tested and per child expended-total (-.16)
% tested and health services cost/child (+.3)		% tested and # children enrolled (-.07)
% meeting health services guideline requirements and health services cost/child (+.4)		% meeting health service guideline requirements and # children enrolled (-.14)
% meeting health services guideline requirements and per child expenditure - total (+.2)		% meeting health services requirements and personnel cost/child (-.02)
% tested and % meeting health service guideline requirements (+.9)		% tested and grant size (+.16)
		% meeting health services requirements and grant size (+.10)

1/ A rough test of the significance of the observed ρ can be obtained by comparing it with its standard error as given by the formula.

$$\sigma_\rho = \frac{1.05\ (1-\rho^2)}{\sqrt{N}}$$

A ρ= .2 is roughly significant at the .05 level of confidence.

children tested[1/] (ρ= -.2) as well as the percent of children meeting the health service guideline requirements[2/] (ρ= -.2). This could mean either that projects planned well (i.e., determined the amount needed for health expenditures per child) or were flexible enough to enroll additional children if the resources allowed and also did well in providing the required health services to the additional children enrolled.

As might be expected, grant size did not affect project performance on testing children enrolled (ρ= +.16) or on meeting all the health service guideline requirements (ρ= -.14) - neither correlation being significant at the 5% level.

b. Treatment Needed

Hypothesis: Projects that do well on one health service variable do well in all three health service variables.

Conclusion: Projects that test a high percentage of children find a higher percentage of children needing treatment than do projects who do not test many of the children. Table II-3 shows that there is a high positive correlation between percent tested and percent tested needing treatment (ρ= +.6).[3/] In addition, there is a very high positive correlation between the two health service output measures: percent tested and percent meeting health service guideline requirements (ρ= +.9).[4/]

1/ See Figure E-4 in Appendix E.
2/ See Figure E-5 in Appendix E.
3/ See Figure E-6 in Appendix E.
4/ See Figure E-7 in Appendix E.

c. Size of Project

Hypothesis #1: Smaller projects should be able to provide health services to children more effectively than large projects.

Conclusion: Enrollment seems to have no effect on the performance of projects in providing the required tests and health services to the children. No significant correlation existed between size of project and percent tested or size of project and percent meeting health services guideline requirements. Therefore, with the present data no conclusions can be made about the optimal size of the Health Start projects in respect to services provided.

Hypothesis #2: Projects with few children enrolled should be able to reduce health service cost per child from their use of services not requiring OCD expenditures than projects with large numbers of children enrolled.

Conclusion: We have shown previously that OCD cost for the total program per child and the cost for health services per child have significant positive correlation with the health services given, while the grant size (one indicator of size of project) has no significant correlation with health service output measures. These correlations indicate, first, that OCD costs go up as more services are provided (a relationship one would like to minimize by encouraging projects to find more services that do not require OCD funds) and, second, that projects with smaller grants provide just as complete services to children as projects with larger grants, indicating that grant size is not an important factor.

However, if we use number of children enrolled as the indicator of size rather than grant size we find a significant negative correlation

between health service cost per child and number of children enrolled (ρ= -.3), indicating that the smaller the project the higher the health service cost per child. This could mean that larger projects were more successful in obtaining services not paid for from OCD funds than smaller projects, or that large projects provided fewer services per child than smaller projects. Correlations run between number of children enrolled and our output measures, however, showed no significant correlation, thus ruling out the latter explanation. There seems to be some indication, therefore, that larger projects in terms of the number of children enrolled were somewhat more successful in finding services not requiring OCD fund expenditures than projects with smaller numbers of children enrolled.

C. Planned Variation Approach For Third Year Health Start

This chapter has emphasized the fact that interesting trends have appeared in the first year Health Start program, but none of them can be explained entirely by the data presently available.

Over the last nine months, the Institute has pressed the argument that evaluators could make more definitive estimates of the relative effectiveness of alternative Health Start program models if program variations are specified in advance and carefully controlled.[1/]

In the interim report, the Institute identified a number of alternative program models that might be tested by the Office of Child

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1/ Appendix H includes Urban Institute communications to OCD recommending adoption of models for Health Start program.

Development through a "planned variation demonstration," for example, tests of the relative effectiveness of alternative detection schemes (screening by paraprofessionals, by both paraprofessionals and professionals, or by professionals only) or of alternative health education schemes (in the home or through group meetings). The Office of Child Development might, on the other hand, be more interested in testing the relative effectiveness of alternative ways of coordinating delivery of health services to economically deprived preschool children. Based on our experience over the last two years, the Institute could develop, in one or more of those areas, two or three models of program variations that have high potential for success.

If one of the main purposes of the Health Start demonstration is to identify successful procedures, strategies, and methods of operation that could be transferred and applied to Head Start or other types of health service delivery programs, then in the third year OCD should be specifically testing those procedures identified in the first two years as being highly promising for possible transfer to other programs.

If the decision is made to test a small number of models in the third year, then it is essential that Health Start become a nationally directed program with national controls. Also there are a number of important technical problems that must be considered in the design of such a program. The major technical problems that should be considered in the planning stages are:

1. Selection of Program Variables for Testing

If the number of projects funded is to be small, then only a very limited number of program variations can be tested if any statistical significance is to be attributed to the difference detected between the results of projects exemplifying different values of the program variable (i.e., different program models).

2. Number of Sites

One of the important technical problems in designing a planned variation demonstration is to insure that there is an adequate number of projects of each model included in the design. At least three (and preferably four or five) replications of each model should be tested to insure that the effects of the variations can be differentiated in the analysis from the effects caused by unique features or characteristics of the projects (such as differences in the ability of the coordinator and staff, differences in the health needs of the children enrolled, etc.).

3. Selection of Sites

There are two conflicting requirements concerning site selection where trade-offs must be made in the design of a planned variation demonstration. For purposes of control, one would like all sites to be as alike as possible in order to reduce the amount of variability caused by factors other than the differences in the program variations being tested. On the other hand, for purposes of generalization, one would like to have the program variations tested across as wide a range of background conditions as possible.

Trade-offs between these conflicting requirements are usually arrived at by selecting three or four groups of homogeneous sites where the number of sites in each group equals the number of program variations to be tested, and the groups are selected to represent a reasonable range of background conditions. If, for example, four different models are to be tested, then one might select four groups of four sites where the four sites within each group are as homogeneous as possible, and the four groups are heterogeneous in respect to background conditions (community characteristics).

4. Assignment of Models to Sites

The models should be randomly assigned to the sites in each group. For analysis purposes, this is an extremely important but often neglected design requirement.

5. Control

One of the most important administrative requirements is that the site selection and assignment of models be done by the national office. In addition, the fact that program models are imposed on projects does not necessarily insure that projects will follow those models. It is

essential that projects be carefully monitored from the national level to insure that the models are being followed.

D. Applications of Knowledge Gained in Year One

While it would be possible to use the planned variation approach to test a number of hypotheses, some of the conclusions from the first year's evaluation are already clear enough to suggest immediate incorporation into project guidelines and grant conditions (e.g., absolute requirement that a nurse serve as health coordinator, assurance of sufficient funds for delivery of health services, developing special service models for projects serving migrant children).

III. ASSESSMENT OF THE HEALTH START PROGRAM: PROGRESS IN MEETING PROGRAM OBJECTIVES

A. Introduction

The 1971 Health Start guidelines issued on February 18, 1971, set three program objectives:

> "1. to increase the number of children receiving health services similar to those provided in the regular Head Start programs.
>
> "2. to develop methods of insuring delivery of health services in areas of limited health resources.
>
> "3. to work with other local, state and national agencies to gain their assistance in providing health services for poor children." 1/

Chapter IV addresses the problems related to the interpretation of these objectives and the other guideline contents. We will discuss here the progress in meeting the stated program objectives.

B. Objective #1: Increasing the Number of Children Receiving Head Start-Like Health Services.

This objective can be interpreted in two ways: (1) that more children were expected to receive health services in Health Start than would receive them in Head Start (for the same OCD dollars);2/ (2) that Health Start projects were expected to enroll more children than do Head Start projects (on average) thereby offering more children health services

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1/ See Appendix A for Health Start guidelines.

2/ Since the money for the demonstration program came from summer Head Start funds, it is assumed that the money would have been spent on regular summer Head Start.

in a given community.

Both of these interpretations require a knowledge of (1) what health services are required for Head Start, (2) what health services are actually being given in Head Start projects, (3) the average number of children enrolled in Head Start centers, and (4) costs for Head Start health (for the total program, for projects and for individual services, as well as per child costs).

As was mentioned in Chapter II, data on Head Start health services do not lend themselves to a reliable comparative analysis of the Head Start health component and the Health Start program. However, if one assumes that the required health services for the two programs are essentially the same,[1/] then Health Start did provide health services to more children than would have received them through summer Head Start. In fiscal year 1971, $46.6 million was spent on summer Head Start programs for 118,125 children, yielding a per child cost of $394.[2/] The Health Start program enrolled 9,947 children (including Hammond, the converted Head Start) at a per child cost of $121, less than one-third of the cost for summer Head Start. Therefore, since the Health Start data on the percentage of children tested and completing treatment are similar to the somewhat suspect Head Start data, it is safe to assume that almost three times as many children received health services

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1/ It is unclear whether medical examinations are required or not for Head Start children. The Rainbow Series Book #2 specifies that a medical examination is required only when the medical history or screening test indicate an abnormal condition; the Manual of Policies and Instructions clearly states that all Head Start children must receive a medical examination.

2/ "Project Head Start Statistical Fact Sheet Fiscal Year 1971."

through Health Start than if the money would have been spent on summer Head Start programs. Because there are no recent data on the portion of Head Start expenses that represent costs of health services, we can only assume that the difference in total cost of the two programs results from the facts that (1) required Head Start components (e.g., social services and daily activities for the children enrolled) were not included in all Health Start projects and/or (2) more health resources were "coordinated" (paid through outside resources) in Health Start than in the Head Start program.

If, on the other hand, the first Health Start objective did refer to more children receiving health services in individual projects then, again, Health Start met the objective. Health Start projects tended to be larger than Head Start projects; therefore more children in a given community received more health services (assuming again that the health services given in the two programs are similar).

C. Objective #2: Developing Methods to Deliver Health Services to Children in Areas of Limited Resources

There are two ways that health resources may be considered "limited:" (1) very few providers exist in an area either because of the remoteness of the location or because of the small proportion of providers to the population relative to other areas; (2) providers exist but very few are "available" to either poor families or to recipients of federal resources. We will consider the latter situation in Chapter VII, which addresses problems encountered in the program. (Indicators on the "conservativeness" or cooperativeness of each of the Health Start health communities would be needed to analyze the data for the success of the

projects in "opening up" resources to the Health Start population.)[1/]

Nor is there a single source of data about the existence (or availability) of federal, state and local health resources for the poor--never mind those in poverty 0-6 years of age.[2/] During the Urban Institute monitoring visits, an attempt was made to assess the existence and availability of health resources in Health Start communities. These data are fragmentary at best. Most of what was learned reflected the health coordinators' knowledge, since there was insufficient time during the site visits to conduct an independent assessment of the community health resources.[3/]

The Health Start guidelines did not require regional offices to determine whether the projects to be funded were in areas with many health resources (to be "coordinated" and used in Health Start) or in areas with limited health resources (which would preclude much coordination). However, in interviews with the regional offices, the Urban Institute found two regions (VIII and IX) that selected Health Start sites because of the lack of services available in the communities.[4/] Two of

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1/ One Health Start project, Flint, conducted a survey of the physicians in the community to find out how many would accept Medicaid patients. The yield was small, with some MD's indicating that they already reached their "quota." The Health Start coordinator offered the updated list as a shared resource to the public health department, to aid them in their referrals.

2/ The HEW Secretary's Task Force on Child Health recently compiled information about HEW health resources for children but does not identify locations of services at the community level. Other data are available for numbers of providers, e.g., AMA data on physicians and hospitals, but no source has been found for resources available at the local level for economically disadvantaged populations and specifically which could be used for preschool children.

3/ The Urban Institute's analysis plan for the second year Health Start includes a systematic attempt to determine what health resources are available to the 1972 Health Start project.

4/ See Health Start: Interim Analysis and Report by Joe N. Nay et al. The Urban Institute, January 3, 1972.

the three projects in those regions will be presented as case studies of approaches used to find providers for the Health Start children. There are certain similarities between the two communities: both are in the southwestern United States, in rural areas, serving predominately Spanish-surnamed populations with extremely low per capita incomes. The projects had similar handicaps: a large geographic area to serve and almost a dearth of health resources. They differed greatly, however, in the amount of "coordination" that was done and in their abilities to do what was required in the Health Start guidelines.

1. Center, Colorado[1/]

The Center project, funded through Region VIII, serves Saguache County in the San Luis Valley in southwestern Colorado. Until recently, when a physician was assigned to Center through the HEW National Health Service Corps, the county with a population of about 4000 had only one physician (who had major heart surgery at the beginning of Health Start year). There is only one public health nurse in the health department to serve the entire county. There is no hospital, no dentist and no ophthalmologist. At about the same time that Health Start began to enroll children, the Saguache County Medical Clinic, an affiliate of the Saguache County Community Council (the Head Start grantee) was opened and staffed with week-end volunteer physicians from the Denver area, over 200 miles away.

The health coordinator used these physicians from the University of Colorado School of Medicine for all Health Start physical examinations. In

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1/ See Health Start: Profiles of Selected Projects by Nancy Perlman, The Urban Institute, April 1972.

addition, a child health associate from the medical school was assigned to Center for the summer to examine the children and make referrals when necessary to Colorado General Hospital in Denver. A dentist was attracted to Center for one brief month (because of the Health Start money, according to the coordinator) and treated a few of the children. The remainder of the dental work was done by a dentist in Monte Vista, just south of Center.

Community aides, after being trained by the Special Education Department of Adams State College, did hearing and vision screening. Adams State also did speech and psychological testing and began follow-up on the eight children who had hearing problems and needed lip reading training. Adams State was to do the follow-up on the psychological and speech problems found, but all their work was cancelled because of a cut-back in funds from the state legislature. Ten children were transported to Canon City (240 miles round trip) to have their eyes examined by an opthalmologist--the nearest one to Center.

Throat cultures were taken several times a year and were processed by the county health department in their strep lab. Children with positive cultures were followed up by the public health department using penicillin (if appropriate) supplied by the Colorado State Public Health Department. Immunizations, of course, were provided by the health department. Follow-up medical care was provided by the Saguache County Medical Clinic, Crippled Children's, and Colorado General Hospital - at no expense to Health Start.

Center, then, represents a project where the solution to the problem of limited health resources is importation of service, exportation of

children and coordination of resources. Personnel costs were high (due to one-to-one aide training program in the home combined with a strep surveillance program), the costs for health services were high, but so also were the number of children tested, the incidence of health problems found, and the completion rates for the required (and additional) health services.

2. Nogales, Arizona

The Nogales project, part of the Tucson project funded by Region IX, covers Santa Cruz County, bordering Mexico. The Pima County part of the Tucson project (Tucson and surrounding rural areas) has adequate resources (save Medicaid which is not available in Arizona); Santa Cruz County, like Center, has virtually none.

Three local physicians provide a minimum of care to the poor through the county health department. They are the same three physicians who serve the entire county. Unlike many local health departments, the Santa Cruz County Health Department offers no well-baby clinics. There are, however, a limited number of services offered by two overburdened public health nurses and one nutritionist: immunizations, vision screening, hearing screening and nutritional counseling. At the beginning of the Health Start program, there were no dentists residing in Nogales; however, three dentists from Tucson (60 miles away) spent one afternoon a week in their Nogales offices.

The Health Start children in Nogales did not fare as well as did those in Center, because of the vast difference in experience and expertise

of the two coordinators.[1/] The Center project reflected the experience and talent of a former school nurse. She has also participated in health research studies involving Saguache County. The coordinator (aide) in Nogales, on the other hand, had little preparation for her position. Her lack of administrative and organizational skills have led to an unusual situation: children who need dental work, dentists who are willing to treat the children and money to pay the dentists - but no time for appointments because a scheduling plan was not worked out to take advantage of the weekly visits by the Tucson dentists. As late as April, not one child had seen a dentist. Thirty-five-thousand dollars was left over in the Tucson budget at the end of the year (more money than the total of almost every other project grant). The regional office has allowed the Santa Cruz Area Council to spend the money for dental follow-up, which may be completed as time goes by.

D. Objective #3: Working with Other Local, State and National Agencies to Assist in Providing Health Services to Poor Children

Several factors can affect a Health Start project's success in coordination of resources: what resources exist, the degree of cooperation of the other agencies, eligibility requirements, the degree to which other

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1/ Mid-way through the year the regional office delegated the Nogales project to the Santa Cruz Area Council in an attempt to settle the personnel and political problems which had stopped all activities in the Nogales project. The coordinator in Tucson, a highly qualified public health nurse relinquished responsibility and supervision to the Santa Cruz Area Council director. A local community resident, hired originally to be an aide, became responsible for providing health care to 316 children. Due to her lack of experience, supervision and direction, her job became an almost impossible task.

agencies resources are in demand, the efforts of the project, the expertise of the project and the amount of outside help the project receives in the coordination effort. We have already discussed the difficulty in determining what resources exist in a given community. Neither do we have the additional information on eligibility requirements, possible overload on resources, etc. The level of effort cannot be addressed in a meaningful way without analyzing the results of the coordination effort. However, the Health Start projects were not able to report or retrieve the actual value of services which were "coordinated." As a result there are only a limited number of projects that reported total costs for the Health Start program (OCD grant expenditures plus coordinated resources).[1/] (All projects were able to report expenditure data for major line items paid through the Health Start grant.)

1. Federal Level Assistance in the Coordination of Resources

The OCD headquarters staff met and/or corresponded with other HEW agency staffs over a period of three months to gain support for the Health Start program. Two agencies in HEW were involved: Health Services and Mental Health Administration (Maternal and Child Health and Center for Disease Control) and the Social and Rehabilitation Service (Medical Services Administration). The only tangible result of the negotiations was the development of a Joint Statement on Coordination between Title

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1/ See Appendix F for Health Start Fiscal Reporting Forms used in the first year program. In order to assist more accurate reporting of the 1972 Health Start expenditures (from OCD grants and other sources), the Urban Institute has trained almost all of the 1972 coordinators in completing the forms and also will be instructing the coordinators and bookkeepers in the field visits.

XIX (Medicaid and Health Start).[1/] The Joint Statement which was sent to OCD and SRS regional offices described Health Start and "the role of Medicaid." It states:

> "Medicaid staff should assist State Agencies and OCD offices to develop cooperative working relationships. Whenever possible, agreements should be reached with community Health Start projects for reimbursement on a pre-negotiated and fixed periodic payment basis for a specified number of Medicaid eligible children... Section 1115 demonstration program might be used as the vehicle for such a project. Assistance in the development of a demonstration project will be provided on request through the regional office to the Office of Innovations, MSA. Such a project can be of value not only to Health Start children, but will also demonstrate the effectiveness of interagency cooperation -- a high HEW priority.
>
> The Assistant Regional Director for OCD... will be seeking help from State Title XIX agencies for specific community Head Start programs. I /Commissioner of MSA/SRS/ urge full cooperation of regional, state and local staff involved in the administration of Medicaid in the effective implementation of the OCD Health Start program."

There were no tangible results at the project level except for two responses to letters written by health coordinators (one from a regional OCD office; one from the national MSA/SRS office) - neither with any precise information on how to get Medicaid to pay for detection procedures or how to acquire a Section 1115 demonstration grant. (See below.)

2. Coordination at the Regional Level

The OCD regional offices were instructed in the guidelines to "solicit support from other HEW components such as HSMHA (particularly Maternal and Child Health), Medicaid (Title XIX), and OEO Neighborhood

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1/ See Appendix C for copy of statement and the Urban Institute questionnaire about Medicaid sent to the coordinators in October 1971.

Health Centers." Of the 10 regions and the Indian and Migrant Program Division (IMPD), only two are known to have produced support (in the sense of reaching agreements on coordination of services, etc.) from other HEW agencies.[1/] One region (II) got support from the Bureau of Community Environmental Management (PHS) for lead poisoning tests; the other region (X) organized a dental health workshop for the Health Start staffs developed by the Bureau of Health Manpower (NIH/PHS).

3. Coordination at the Local Level

As was mentioned earlier, few of the projects provided complete reports on outside resources used in Health Start. (Some projects had difficulty in reporting line item expenditures from their OCD grant, except for major items like personnel, non-personnel and health services.) Five projects did not report any "coordinated" resources, but it is assumed that at least immunizations were provided by the local (or state) health departments. In fact, three of these five projects were known to have used outside resources (by the time of the Urban Institute site visits). Therefore, it is assumed that these projects, and possibly others, did not, or were not able, to retrieve data from the outside resources they used. Therefore, we present the following data on coordination: (1) an overview of resources used across projects for various services, (2) use of Medicaid in Health Start projects and (3) case studies of six projects (with usable data) showing costs of a Health Start program with both OCD expenditures and the value of other resources used.

1/ Information from OCD regional office interviews and field visit interviews with projects.

a. Outside Resources Used Across Health Start Projects

The resource reported as being used most extensively by projects and for the most services is the local public health department (see Table III-1). This is not surprising since immunizations, for example, are available for the entire population and are, in fact, provided on a regular basis by health departments. However, some projects also reported use of Public Health Departments for personnel, laboratory service, medical exams and follow-up treatment, dental exams and dental follow-up, as well as speech and vision follow-up. Medicaid also was used extensively by the Health Start projects, and for a variety of services. Crippled Children's Services, another HEW resource, was reported used by eight projects - for medical and hearing follow-up. As can be noted in TableIII-1, the remainder of resources used varied widely across projects and averaged out to a little more than three providers per project. It is important to restate that the projects may in fact have used more resources in the delivery of health services to the children enrolled but simply did not report them.

b. Medicaid Support at the Local Level

As was mentioned above, the national offices of OCD and SRS, during the planning period, identified Medicaid as a potential source of outside support for the Health Start projects. Section 1115 demonstration money was mentioned in a "Joint Statement on Coordination between Title XIX and the Office of Child Development's Health Start Program."[1/]

1/ See Appendix C. This memorandum was sent to the responsible HEW regional offices and the state agencies administering medical and public assistance programs.

TABLE III-1

COORDINATION AND USE OF OUTSIDE RESOURCES

Resources	No. of Projects	SERVICES REPORTED AS "COORDINATED"																				
		Personnel	Lab Tests	Exams Medical	Follow-up Medical	Exams Dental	Follow-up Dental	Immuni-zations	Screening Hearing	Follow-up Hearing	Screening Speech	Follow-up Speech	Screening Vision	Follow-up Vision	Services Psych.	Education Health	Consultants	Food	Space, Equipment	Transport.	Supplies
FEDERAL																						
U.S. Public Health Service	1	X																				
U.S. Public Health Service Bureau of Indian Affairs	1			X		X	X															
Title XIX - Medicaid	15		X	X	X	X	X			X		X		X								
Crippled Children Services	8				X				X													
U.S. Dept. of Agriculture	1																	X				
U.S. Air Force	1			X																		
Department of Labor - Neighborhood Youth Corps	1	X																				
Department of Labor - Mainstream Program	1	X																				
Office of Economic Opportunity--Emergency Food Prog.	2																	X				

TABLE III-1

COORDINATION AND USE OF OUTSIDE RESOURCES (Continued)

Resources	No. of Projects	SERVICES REPORTED AS "COORDINATED"																				
		Personnel	Lab Tests	Exams Medical Follow-up	Medical Exams	Dental Follow-up	Dental	Immuni-zations	Screening Hearing	Hearing Follow-up	Screening Speech	Speech Follow-up	Screening Vision	Vision Follow-up	Services Psych.	Education Health	Consultants	Food	Space, Equipment	Transport.	Supplies
STATE																						
Medical Schools	2				X					X												
State Colleges and Universities	3				X					X		X										
Health Departments	2		X					X		X	X											
Migrant Health Service																						
Maternal & Child Health Services	3				X												X					
School Services	1													X								
Hospital	3													X								
School of Deaf	2									X												
LOCAL - PUBLIC																						
Public Health	18	X	X	X	X	X	X	X				X		X					X			
CAP	3	X																	X			
Head Start	4	X								X			X		X				X			
School Systems	4	X							X	X	X	X	X	X	X	X			X			

TABLE III-1

COORDINATION AND USE OF OUTSIDE RESOURCES (Continued

Resources	No. of Projects	SERVICES REPORTED AS "COORDINATED"																				
		Personnel	Lab Tests	Exams Medical	Follow-up Medical Exams	Follow-up Dental	Dental	Immuni-zations	Screening Hearing	Follow-up Hearing	Screening Speech	Follow-up Speech	Screening Vision	Follow-up Vision	Services Psych.	Education Health	Consultants	Food	Space, Equipment	Transport.	Supplies
OTHER																						
Voluntary Organizations	2				X					X				X		X			X		
Fraternal Organizations	3				X								X	X					X		
Foundations	3		X		X	X				X				X				X			X
Hospitals	1				X																
Lab Tech.	1		X																		
Physicians	3				X												X				
Dentists	1					X	X										X				
Clinics	3			X	X	X	X	X	X	X	X	X									
Pharmaceutical Firms	4				X																
Insurance (Private),	2				X																
Optometrist	2													X							
Laboratory	1		X		X																
Health Start Families	2				X																
Volunteers	1																				X

The Urban Institute field interviews revealed that many project staffs did not understand the Medicaid program,[1/] much less the role of Medicaid in the Health Start program.

In order to understand more fully the status of Medicaid use at each project, a questionnaire was mailed to each health coordinator on October 15, 1971.[2/] Replies were received from 26 projects which indicated that:

- Six projects did not know how many of their enrolled children were covered by some form of Medicaid. The remaining projects represented an enrollment of 4546 children, of whom 1341 were believed to be covered by Medicaid (about 29%) for some part of the services. The items covered by Medicaid at different locations vary widely.
- No project responding has a written agreement with a state Medicaid agency. Ten projects believed that they have an unwritten, but clearly understood, working agreement.
- Twelve projects were confused about the operation of local Medicaid, twelve were not (two did not answer the question). The most confusing item seems to be eligibility.
- Fifteen projects never heard of the Section 1115 program. Eight knew of its existence.

1/ One coordinator said in response to a question about the use of Title XIX funds: "Isn't that the program for old people?"

2/ See Appendix C.

- Only three projects were contacted by someone about any special arrangement with Medicaid. Two of these were about Section 1115, the other, about regular local Medicaid. On the other hand, seventeen projects tried to develop support from their local Medicaid agency. (Seven said they did not try; two did not answer the question.)
- The questionnaire indicated that, of those projects that initiated contacts, ten were contacts about funding for children already qualified, five were about qualification of additional children, five were attempts to initiate a local joint (Health Start/Medicaid) program, four were inquiries about Section 1115, and seven were attempts to get dental services covered. Some were successful, some failed.
- Because of the lack of coordinating arrangements and other problems, only four projects could say how much support was obtained from Medicaid and two of these four received nothing.
- In eight projects Medicaid covered dental expenses, at six only emergency dental, and at ten no dental services at all.

While many of these responses may possibly be based on erroneous perceptions of local situations, it is important to realize that they have been received directly from the health coordinators running the projects. In general, little help was received from Medicaid unless a child was already clearly eligible. Some local Medicaid people have suggested

that any change in support level for their geographical area must first pass through the legislature of their State. Coverage for specific services (e.g., dental) is based upon the state plans, which vary from state to state. In the field, our interviewers made numerous phone contacts at several sites in attempts to clarify eligibility. We ended up as confused as the health coordinators. One response which most nearly summarizes what we found when asking about eligibility locally was, "Why anyone can apply, honey, we determine each case on an individual basis."

Two examples of inquiries made by health coordinators and the replies received might be of interest. One health coordinator wrote to her OCD Assistant Regional Director for information:

> ...I am writing with regard to the Medicaid program in connection with Health Start. I do not know about this program and would appreciate any information you could give me.
>
> I am not familiar with Section 1115 demonstration program. I would appreciate more information about it. Assistance has been offered in the development of a demonstration project on request through the regional office to the office of innovations, MSA. I would like to request such assistance....

The reply from the OCD regional office was:

> As you probably know, Medicaid is the name of a project under the Social Security Act. Title XIX of the 1966 amendments provides Federal funds to states for health services to persons meeting criteria for medical indigency. Some will be current welfare recipients, others are not.
>
> Services available vary from state to state and county to county, depending on the amount of funds available. Federal provisions are very general. Please contact your local division of public welfare and get information regarding services in . . . Section 1115, of which you speak, is not familiar to me. Please call me if you have any other questions . . .

The health coordinator, being unfamiliar with the organization of HEW and federal legislation, gave up at this point.

Another request for assistance was sent to the Medical Services Administration in Washington describing the local project and asking for information on Section 1115 demonstration programs.

We will include the reply in full since interpretations will vary:

> We are pleased to learn of your interest in working cooperatively with the Medicaid program as outlined in our Information Memorandum issued on April 5, 1971, (see para.5, on page 2 of the attached "Joint Statement on Coordination Between Title XIX and the Office of Child Development's Head Start Program").
>
> Program priorities are currently being determined under the SRS Research and Demonstration program under which the Section 1115 demonstration program will operate for the current fiscal year, and consideration might be given to a project dealing with early screening, diagnosis, and treatment of young children. The Medicaid program would be especially interested in such an undertaking since the legal requirement for early screening and diagnosis of needy young children has not yet been implemented, and a demonstration project testing out ways of doing this, with measures of cost benefit to program and value to children included might be of value.
>
> We are, therefore, referring your inquiry to our regional office, since such a project must be submitted by the State Medicaid agency and they could be helpful in making this contact. Discussions will also be held with Mr. Hank Acquirre, of the Indian Migrant Health Division, Office of Child Development, to determine how we both can be most helpful to you in the possible development of a project that might come within the scope of the draft proposal submitted to our research program for consideration (see copy attached).
>
> Sincerely,
>
> Dr. H. R. Jolley
> Director, Office of
> Program Innovation

Enclosure:

(Enclosure)

Martz
9/16/71

Early Screening, Diagnosis and Treatment of Children

Description

A demonstration project to test cooperative efforts and other measures to effectively implement legal requirements for early screening, diagnosis, and treatment for needy young children under Title XIX, and to evaluate cost benefit to the Medicaid program of this provision, as well as improved health status for children.

Hypotheses

The provision of early screening, diagnosis, and treatment of children can identify health problems at an early stage when they are most treatable, as well as prevent much needless illness in later life. In addition to lessening the cost of medical care in the long run, it will enable children to enjoy the benefits of optimum health which can contribute measurably to their attaining self-sufficiency and self-support when they mature.

Goals and Objectives

Goals and objectives of this project are particularly relevant to implementing the legal requirement for early screening, diagnosis, and treatment of needy children, guidelines for which are expected to be issued as soon as they are approved by the Secretary.

Methodology

Health Start projects and others who have already expressed interest (see below) would provide the setting for initiating such a project. Cooperative arrangements would be worked out between the project and the State Medicaid program (and its local counterpart) in selecting appropriate samples of children for whom a varied range of medical care services would be provided following identification of their need after screening and diagnosis. Interagency coordinated efforts in making needed service available and supportive health-related services would be provided to assure effective utilization of care. Evaluation of methods used in developing cooperative arrangements, and in providing the range of necessary services, as well as their effective utilization would be undertaken, with control groups providing base line data. In this way, minimum requirements included in the proposed guidelines would be tested against additional costs as well as values for the health status of children by extending the scope of services to include additional services diagnosed as needed, and/or by extending services to additional age groups beyond 6 years now proposed.

(Enclosure Con't)

Possible Locales

Several Health Start projects which have already expressed interest in response to MSA Information MEMO, April 1971-"Joint Statement on Coordination between Title XIX and OCD's Head Start Program" (see attached) -- Migrant and Indian Coalition for Coordinated Child Care, The Dalles, Oregon; Hampshire Community Action Commission, Northampton, Massachusetts; Cream City Neighborhood Health Program, Milwaukee, Wisconsin; Day Care Services for Children, Inc., Milwaukee, Wisconsin; and Health Start Project, Dallas, Texas; as well as many other individuals, including Dr. Amos Johnson (Medicaid Advisory Council Member) who has been trying to develop a project in Sampson County, North Carolina (a State with a very limited Medicaid program); Dr. Jeanne Griffith, Loyola University, Maywood, Illinois who submitted a project proposal in August, 1970; and Dr. Arthur Sherman who is developing a multi-phasic screening program in Morristown, Pennsylvania.

Time

A three year period would be preferable to show the best results.

Cost

$100,000 per year.

(Cleared by Jean Hoodwin, MSA)

[End of MSA Letter and Enclosure]

This reply would seem to indicate that the Section 1115 program was not ready to commit funds immediately; but rather sometime in the future. With more detailed guidance, perhaps many of the Health Start projects could have received a Section 1115 demonstration grant.

The new Medicaid regulations covering screening and diagnosis of needy children were published in the Federal Register (P.21409) on November 9, 1971 and became effective within 90 days. Since part of this section is aimed at children under six, many of the projects might be expected to benefit from it if the mechanism for their participation can be developed.

Most of the Health Start projects have provided preventive examinations from their own funds in areas where Medicaid does not cover such exams. Service funded by Medicaid appears in general to have been only

that for which the child's eligibility could be clearly established (in many cases already was established) for reimbursement of medical services. So while Health Start did receive some support from Medicaid--in the sense of turning up cases for treatment among Medicaid eligibles that would not otherwise have been treated--little special assistance was in evidence in the first program year. Some projects attempted to enroll additional children in Medicaid when they appeared to be eligible, but with mixed success. Even if the children were enrolled, some projects were faced with another problem: doctors and dentists not accepting Medicaid patients, even if their eligibility is already established. Therefore, even though little was done with Medicaid money as a result of national efforts at coordination, Title XIX funds were of support to Health Start. And, in fact, Medicaid still represents one of the biggest potential sources of support for the Health Start program, especially considering the potential of the Early Periodic Screening, Detection and Treatment funds (EPSDT) now available.

c. Case Studies of Coordination of Resources

Only six projects reported data completely and accurately enough to be able to determine total program costs, i.e., including both the cost to OCD and the amount of money or services provided by other agencies and individuals. These projects are presented as case studies, not models of the Health Start program because in many ways they are unique unto themselves. Even though some of the 29 projects are similar in their approaches, e.g., offering day care, merely holding clinics for pre-schoolers, providing home health education; there are enough dissimilarities of the components, (e.g., day care and individual physical exams vs. day care

and group screening at a clinic) to prevent generalizations about costs for various models. The six projects can be characterized as follows: two projects with aide training/home health education components, two projects providing day care, one project providing health services to an existing day care program, and one project with a computerized multiphasic screening and referral program. They range in total program costs from $33/child to $299/child, from no outside resources reported to $155/child of outside funds and the services reported. (See Table III-2.) The total program costs, OCD costs, and the amounts of outside resources used seem to have no consistent relationship to the size of project or to the amount of health services given. (See discussion of health services in Chapter IV and data in Appendix D.)

The Center project (Table III-3), presented above as an example of a Health Start in an area of limited health resources, was a relatively expensive project due primarily to two factors: the home health education program and the high rate of completion of health services. As can be noted in Table III-3, only 3% of the cost of the program came, however, from outside resources. The Flint project, having access to funds and services from a local foundation, generated about 23% of the total program cost from outside sources. Even so, the total amount for the program is considerably smaller than the cost of the Center project because the project was understaffed and underpaid (one coordinator paid for half-time work and working 60 hours a week and three aides working only during the intensive phase) and, probably related to the first factor, had a low completion rate for the health services.

TABLE III-2 - CASE STUDIES OF HEALTH START PROJECTS SHOWING % OCD EXPENDITURES AND OUTSIDE RESOURCES USED

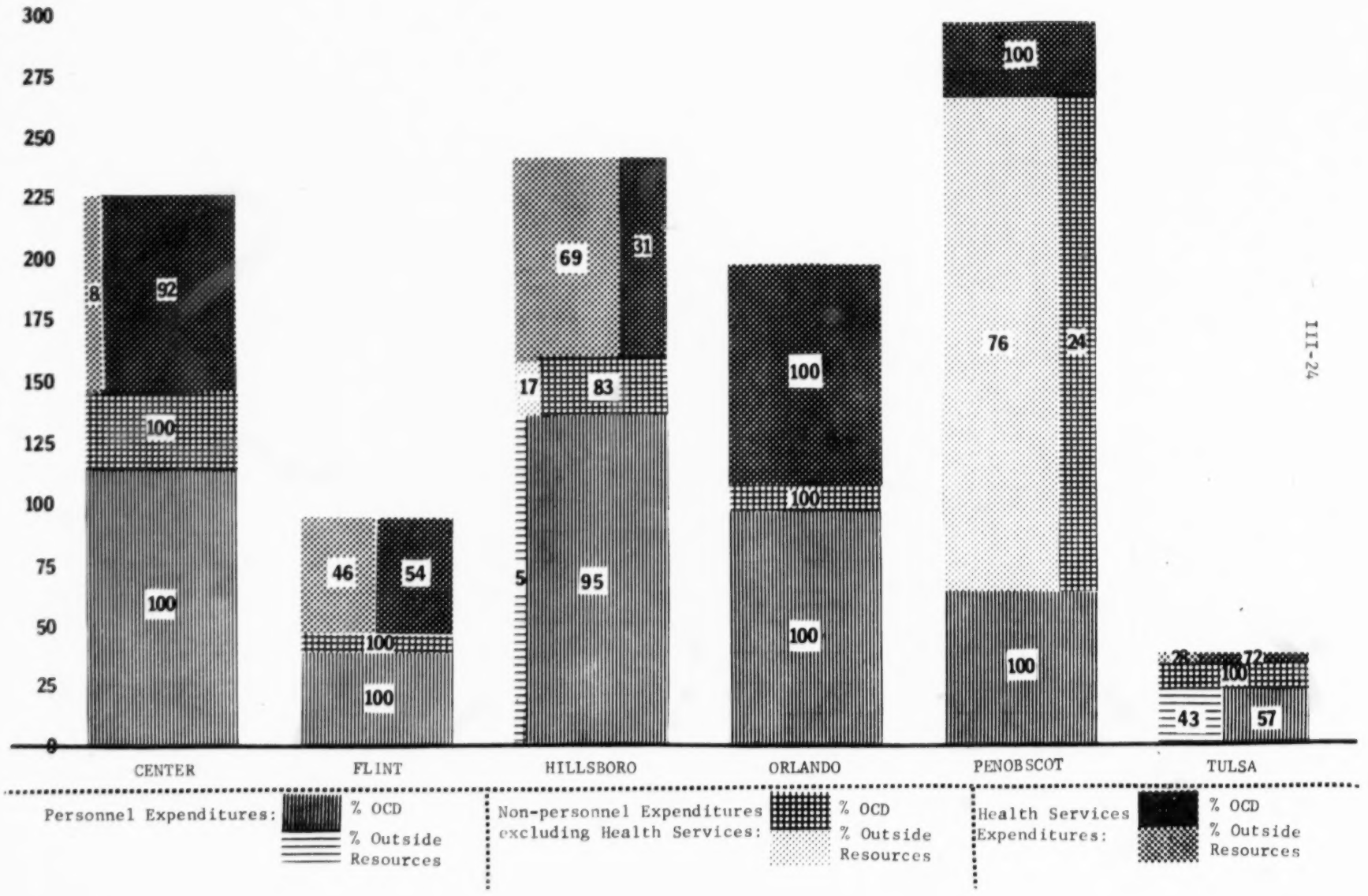

TABLE III-3 - EXPENDITURE DATA: CENTER, COLORADO

Enrollment (March): 177
Grant Size: $40,000.00
Amount Expended (March): $38,774.00

Cost per Child - OCD (March): $219.06
Cost per Child - Total (March): $225.02

Item	Health Start Grant		Other Resources			Total 1/
	Per Child Cost	Number Children	Name	Per Child Cost	Number Children	Cost/Child
Personnel	$114.57	177 (includes coordinator, 3 aides, bookkeeper)				$114.57
Health Services						
Laboratory Tests and Medical Evaluations)	$ 6.29	175				$ 6.29
Dental Evaluations	9.00	115				9.00
Immunizations			Public Health Department	?	?	
Follow-up Dental	66.65	114				66.65
Follow-up Hearing	27.78	18				27.78
Follow-up Speech	45.45	11				45.45
Follow-up Vision	17.50	30				17.50
Follow-up Medical	30.87	39	Total Medical Follow-up	$ 19.91	53	42.62 2/
			Crippled Childrens	83.33	3	
			State Hospital	35.00	2	
			State College	25.00	10	
			Public Health Department	33.33	3	
			Private Physicians	31.00	5	
			Local Clinic	6.67	12	
			Psychologist	8.33	18	
Total Health Services	$ 70.31	177		$ 5.96	177	$76.27
Travel	$ 20.36	177				$ 20.36
Consumable Supplies	$ 3.63	177				$ 3.63
Rental, Lease & Purchase of Equipment	$ 2.00	177				$ 2.00
Health Education	$ .28	177				$ .28
Other	$ 2.26	177				$ 2.26
Total Non-Personnel	$104.49	177		$ 5.96	177	$109.89
TOTAL PROGRAM COST	$219.06	177		$ 5.96	177	$225.02

1/ Based on enrollment.
2/ Based on those getting treatment.

TABLE III-4 - EXPENDITURE DATA: FLINT, MICHIGAN

Enrollment (March): 349
Grant Size: $45,200.00
Amount Expended (March): $38,393.17

Cost per Child - OCD (March): $69.55
Cost per Child - Total (March): $90.31

Item	Health Start Grant		Other Resources			Total
	Per Child Cost	Number Children	Name	Per Child Cost	Number Children	Cost/Child
Personnel	$35.88 (includes coordinator and health aides)	349				$35.88[3]
Health Services						
Laboratory Tests			Mott Children's Health Center	$ 6.88	236	$ 6.88
Medical Evaluations	$ 15.00	237				15.00
Dental Evaluations			Mott Children's Health Center		235	?
Immunizations			County Health Dept., Health Center	?	48	?
Follow-up Dental	~140.56	~ 37[1]				140.56
Follow-up Hearing			Mich. School for Deaf, Health Center	25.00	3	25.00
Follow-up Vision			Health Center, Medicaid	17.20+[2]	10	17.20+
Follow-up Medical			Health Center, Medicaid	5.66+[2]	36	5.66+
Total Health Services	$ 25.08	349		20.76	349[3]	$ 45.84[3]
Travel	$ 5.06	349				$ 5.06[3]
Consumable Supplies	$ .79	349				$ .79[3]
Rental, Lease & Purchase of Equipment	$ .86	349				$ .86[3]
Food	$ .57	349				$ .57[3]
Other	$ 1.31	349				$ 1.31[3]
Total Non-Personnel	$ 33.67	349		20.76	349	$ 54.42[3]
TOTAL PROGRAM COST	$ 69.55	349		20.76	349	$ 90.31[3]

1/ From March Health Control Sheet.
2/ Medicaid amount not reported.
3/ Based on enrollment.

69

Hillsboro, like Center, had a one-to-one health education program extending over the year and utilizing community aides. This accounts for the relatively high personnel costs. Unlike Center, however, there were resources available to the community that were used in the Health Start program, primarily for health services. The coordinator, a public health nurse like the coordinator in Flint, seemed to uncover many health problems that required treatment. A good portion of the resources from public as well as private sources paid for the follow-up treatment for the children enrolled. (See Table III-5.)

Orlando, the smallest of the 29 Health Start projects, in some ways represented the best and the worst of the Health Start projects (relative to the guideline requirements). The completion rate was high for the health services, yet almost no outside resources were used in the program as of March, save follow-up care for nine children and immunizations from the public health department. (See Table III-6.) It is possible that the reason that most of the cost was incurred by OCD is that Orlando represents a community where there is little support for federal programs or their recipients. In some ways, because Orlando did not use outside resources extensively and, hence, did not have problems retrieving the information on costs of generated resources; it could, in fact, be considered as the standard for the cost of a program package like Health Start, especially because most health services were complete. (We will discuss the overall cost issues below.)

Penobscot, a full-day camp for both children and parents, was the most expensive project of the six presented as case studies, with one of the highest costs per child in the program. The resources generated were

TABLE III-5 - EXPENDITURE DATA: HILLSBORO, OREGON

Enrollment (March): 160
Grant Size: $38,100.00
Amount Expended (March): $27,777.61

Cost per Child - OCD (March): $173.52
Cost per Child - Total (March): $241.34

Item	Health Start Grant		Other Resources			
	Per Child Cost	Number Children	Name	Per Child Cost	Number Children	Total Cost/Child
Personnel	$127.50 (included coordinator and 3 aides)	160	County Health Department Consultants (psychological, medical and dental)	$ 3.83 2.34	160 160	$133.67
Health Services						
Laboratory Tests	$ 1.04	121	County Health Department, Hospital Labs	$ 6.11	~160	$~6.90 1/
Medical Evaluations	12.44	70	Title XIX	?	6	12.44
Dental Evaluations	4.77	71	Community College	2.96	71	7.74
Immunizations	3.66	98	County Health Department	.71	98	4.37
Follow-up Dental	55.40	43	Dental Aid for Children	?	5	55.40+ 2/
Follow-up Hearing			IED, State University Medical School, Univ.	16.00	10	16.00
Follow-up Speech			IED, Private Therapist, Health Dept., etc.	19.50	10	19.50
Follow-up Vision			Elks, Lions, Health Dept.	14.44	9	14.44
Follow-up Medical	150.15	15	Follow-up Medical	179.67	42	135.02 2/
			Shriners	5306.25	6	39.77
			Title XIX	175.00	21	
			State University Medical School	85.00	2	
			Crippled Childrens	47.50	2	
			Health Department	600.00	3	
			Health Department	?	13	
Total Health Services	$ 26.41	160		$ 58.05	160	$ 84.46 3/
Travel	$ 11.01	160	Volunteers	.60	160	$ 11.60 3/
Space Cost, Rentals	$ 1.51	160	Schools, Churches, CAP	$ 1.72	160	$ 3.23 3/
Consumable Supplies	$ 2.39	160	Drug Firms, Food Companies	$ 1.02	160	$ 3.41 3/
Rental, Lease & Purchase of Equipment	$ 1.40	160				$ 1.40 3/
Food			Private Donations, USDA	$ .25	160	.25 3/
Other	$ 3.65	160				$ 3.65 3/
Total Non-Personnel	$ 46.37	160		$ 61.64	160	$108.01 3/
TOTAL PROGRAM COST	$173.52	160		$ 67.81	160	$241.34 3/

1/ Based on higher number.
2/ Based on total number receiving services.
3/ Based on enrollment.

TABLE III-6 - EXPENDITURE DATA: ORLANDO, FLORIDA

Enrollment (March): 100
Grant Size: $25,000.00
Amount Expended (March): $19,043.74

Cost per Child - OCD (March): $190.44
Cost per Child - Total (March): $190.44 +

Item	Health Start Grant		Other Resources			Total Cost/Child
	Per Child Cost	Number Children	Name	Per Child Cost	Number Children	
Personnel	$92.56 Coordinator, 3 student interns, educational coordinator	100				$92.56
Health Services						
Laboratory Tests	$ 1.76	100				$ 1.76
Medical Evaluations	11.08	95				11.08
Dental Evaluations	20.26	95				20.26
Immunizations			Public Health Department	?	95	?
Follow-up Dental	71.73	56				71.73
Follow-up Hearing	15.00	1				15.00
Follow-up Medical	102.83	10	Crippled Children's Spec. Education, Title XIX, County Medical Clinics	?	9	102.83
Total Health Services	$ 86.47	95				$ 86.47
Travel	$ 4.36	100				$ 4.36
Space Cost, Rentals	$ 2.18	100				$ 2.18
Consumable Supplies	$ 4.16	100				$ 4.16
Food	$ 1.14	100				$ 1.14
Other	$ 3.44					$ 3.44
Total Non-Personnel	$ 97.87					$ 97.87
TOTAL PROGRAM COST	$190.44					$190.44

primarily to support the day camp operation, which was not required in the Health Start guidelines. Without the camp expenses, Penobscot would have had a very small percentage of the total program cost generated from outside sources. (See Table III-7.) In any case, if more health services had been given, the total cost probably would have risen greatly. In other words, the extensive resources generated for the project did not affect the project performance in the health service area (even though it is assumed that the children and parents acquired some psychic benefits from the camp experience).

Tulsa, the largest of the Health Start projects, as well as the only multiphasic screening project, had the lowest per child cost both for the grant expenditures and for the total program. Even though the low cost can be explained partially by economics of scale - the large number of children in the project reducing the per child cost for personnel--it is also due to the use of paraprofessionals in the screening processes, the low incidence of health problems detected, and the fact that it was a referral and not a treatment program.[1/] The Tulsa City - County Health Department was the major in-kind contributor, providing staff, space and equipment for the program. (See Table III-8.) Health Start paid the matching portion of the salary of the 13 summer interns from the Mayor's Youth Council who did outreach, administered screening tests, worked with the computer operations and on administrative tasks.

1/ Few of the expenditures for Health Start from other agencies could be retrieved or included in our cost estimates.

TABLE III-7 - EXPENDITURE DATA: PENOBSCOT, MAINE

Enrollment (March): 265
Grant Size: $37,900.00
Amount Expended (March): $36,434.10

Cost per Child - OCD (March): $137.48
Cost per Child - Total (March): $292.06

Item	Health Start Grant		Other Resources			
	Per Child Cost	Number Children	Name	Per Child Cost	Number Children	Total Cost/Child
Personnel	$ 61.84[1]	265	Head Start Director	?	265	$ 61.84[4]
Camp	135.50[1]	97				
Satellite	18.46[2]	168				
Health Services						
Laboratory Tests	$ .25	219				$ .25
Medical Evaluation	6.46	264				6.46
Dental Evaluations						
Immunizations	.60	264				.60
Follow-up Dental	18.48	211?				18.48?
Follow-up Hearing				?	4	?
Follow-up Speech				?	6	?
Follow-up Vision				?	4	?
Follow-up Medical	13.41	94				13.41
Total Health Services	26.26	265				26.26[4]
Travel[3]	$ 89.73	97				$ 89.73[3]
Space Cost, Rentals[3]			Girl Scouts	$360.82	97	$360.82[3]
Consumable Supplies	$ 6.78	265				6.78[4]
Rental, Lease & Purchase of Equipment	$ .34	265	Girl Scouts	$ 30.93	97[3]	$ 11.66[4]
Food	$ 19.17	97[3]	VANIK	$ 24.74	97[3]	$ 43.91[3]
Health Education	$ 2.06	97[3]				$ 2.06[3]
Other	$ 1.65	265	Lumber Company (tables)	$ 1.23	97[3]	$ 3.32[4]
			Girl Scouts	$ 4.57	97[3]	
			Meade Johnson (Vitamins)	?	265	
Total Non-Personnel	$ 75.64	265		$154.58	265	$230.22[4]
TOTAL PROGRAM COST	$137.48	265		$154.58	265	$292.06[4]

1/ For portion of coordinator, nurse, head counselor, counselors, water safety instructor, bookkeeper, medical secretary, plus cook, assistant cook, teachers, consultants and educational director (6 weeks).
2/ For portion of coordinator, nurse, consultants, tookkeeper, medical secretary (6 weeks).
3/ Camp only.
4/ Based on total enrollment.

TABLE III-8 - EXPENDITURE DATA: TULSA, OKLAHOMA

Enrollment (March): 1806
Grant Size: $48,100.00
Amount Expended (March): $38,538.00

Cost per Child - OCD (March): $21.34
Cost per Child - Total (March): $32.77

Item	Health Start Grant		Other Resources			
	Per Child Cost	Number Children	Name	Per Child Cost	Number Children	Total Cost/Child
Personnel	$ 11.56 (includes coordinator, clerk, part of summer interns' salary)	1806	Total	$ 9.59	1806	$ 21.15
			Public Health Service - M.D.	1.52	1806	
			Mayor's Youth Council - Interns	39.38	1806	
			City County Health Department (includes LPN, Nurse, consultants, child health supervisor & computer analyst).	3.24	1806	
Health Services						
Laboratory Tests			City-County Health Department	$ .05	30	$ .05
Medical Evaluations	←		None	→		
Dental Evaluations			City-County Health Department	5.00	90	5.00
Immunizations			City-County Health Department	?	1532	?
Follow-up Dental	$ 37.68	38	City-County Health Department	12.50	36	25.43
Follow-up Hearing			Mabee Speech & Hearing Clinic		20	
Follow-up Speech			Mabee Speech & Hearing Clinic	3.57	50	3.57
Follow-up Vision	29.64	72				29.64
Follow-up Medical			City-County Health Department	10.00	90	10.00
Total Health Services	$ 1.97	1806		.78	1806	$ 2.74
Travel	$ .92	1806				$ .92
Space Cost, Rentals			City-County Health Department	$ .06	1806	$ .06
Rental, Lease & Purchase of Equipment	$ 2.94	1806	City-County Health Department	$ .06	1806	$ .06
Other	$ 2.84	1806				$ 2.84
Total Non-Personnel	$ 9.77	1806		$ 1.85	1806	$ 11.62
TOTAL PROGRAM COST	$ 21.34	1806		$ 11.43	1806	$ 32.77

These six projects, then, range from no resources generated to over 100% of the grant matched with local support. The Orlando project "proved" that Health Start could provide the health services for the children enrolled with very limited use of outside resources.

IV. ASSESSMENT OF THE HEALTH START PROGRAM: MEETING GUIDELINE REQUIREMENTS

A. Interpretation of Guideline Requirements

One problem that the projects and the OCD regional office staffs mentioned was interpretation of the guideline requirements. There was confusion about the purpose of the Health Start program, the objectives, required components and roles of the various participants. Part of this confusion resulted from ambiguous or conflicting statements. Table IV-1 presents some of the major problems related to the interpretation of the Health Start guidelines.

B. Headquarters Staff

Health Start was a relatively unstructured program, with almost no responsibilities stipulated in the guidelines for the headquarters staff, few for regional offices and most emphasis on project level requirements. The only reference in the guidelines to the headquarters staff concerned the joint headquarters-regional team that was to review the project proposals. The headquarters staff participated in that review held May 3-5; therefore, the national OCD staff met their single guideline requirement.[1/] The headquarters staff played a limited role through the year (partially due to the fact that the person assigned responsibility for Health Start had a full-time position with Head Start health). Besides the few meetings held with Maternal and Child Health (MCH) and the Social

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1/ In the Zigler letter to the ARD's accompanying the guidelines, however, assistance from headquarters was offered: "My staff and I stand ready to assist you in any way we can." See Appendix A.

TABLE IV-1

PROBLEMS RELATED TO THE INTERPRETATION OF THE HEALTH START GUIDELINES

Issue	Problem
Health Start is a demonstration program (which implies the development of innovative techniques and approaches).	Guidelines call for Head Start-like health services, which leaves little room for innovation.
Guidelines call for Head Start-like health services.	The offical Head Start regulations (Rainbow Series and Manual of Policies and Instructions) are contradictory regarding medical screening requirements.
Guidelines call for development of methods to insure health services in areas of limited resources.	The guidelines did not define "areas of limited resources." Neither projects nor OCD regional offices were required to specify whether projects were in areas of limited resources. Also, data are not available on the resources in Health Start communities.
Tests for intestinal parasites, sickle cell anemia and lead poisoning are listed under minimum services in the guidelines.	The Fact Sheet which was circulated several weeks after the guidelines were issued listed those health services as optional.
The bulk of the project funds was to be used for providing direct health services with minimum expenditures for administrative staff.	The guidelines instructed the projects to "supplement and build on comparable health efforts in the community." One would expect the health services costs to be low in areas where existing resources were used (coordinated) and the administrative costs to be high (relative to the health services costs) to support the personnel who do the coordination.
The guidelines present three "models" and an option to develop other "models."	The "models" involved only a variation of the length of the intensive phase and possibly serving two different groups of children. The models were not used as they were described.

and Rehabilitation Service (SRS) resulting in the Joint Statement of Coordination with SRS--the headquarters tasks were (1) sponsoring a coordinators' conference for local health coordinators, (2) answering queries from the regions and projects about interpretations of guideline requirements, and (3) responding to requests for information from Congressional staffs. During the year's time, five headquarters' staff members visited a limited number of projects (about ten)--occasionally to provide technical assistance, but more often to learn more about Health Start operations at local level.

C. The Regional Offices

The cover letter to the Health Start guidelines from the Director of the Office of Child Development to the OCD Assistant Regional Directors' dated February 18, 1971, stated:

> I urge you to solicit support, for the Health Start program, from other HEW components such as HSMA [sic] (particularly Maternal and Child Health): Medicaid (Title XIX), and OEO Neighborhood Health Centers . . . you should also involve the regional Medical and Public Health Service Dental consultants in development of your plans and implementation of the program . . .[1/]

The guidelines indicated that up to $75,000 would be allocated to each region to develop a minimum of two programs. The regions were "encouraged to work with individual summer grantees to restructure their currently planned summer Head Start programs to a Health Start model." Three other regional requirements were specified: regional plans were to be sent to headquarters by March 5, regional staffs were to participate in

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1/ See Appendix A for Zigler letter and guidelines.

the headquarters-regional review of proposals by May 15 and the grants were to be sent out no later than June 1. No mention was made in the guidelines about monitoring or technical assistance requirements for the regions.

1. Soliciting Support from the HEW Agencies

As was mentioned in the discussion on coordination, of the ten regions and the Indian and Migrant Program Division (IMPD), only two are known to have produced support (in the sense of reaching agreements on coordination of services, etc.) from other HEW agencies. One region got support from the Bureau of Community Environmental Management for lead poisoning tests; the other region organized a dental health workshop for the Health Start staffs developed by the Bureau of Health Manpower Education (NIH). Five other OCD regional offices involved HEW agencies in the planning of Health Start and/or in the selection of the grantees to be funded.

2. Involvement of Regional Medical and Public Health Service Dental Consultants

All ten of the regions used the regional medical and/or dental consultants during the planning period. For the most part, the medical and dental consultants were not used in the actual selection[1/] of the grantees but in the development of the regional plans and regional criteria for Health Start. In addition, many medical and dental consultants participated in regional visits to the potential project sites to

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1/ In one region, the medical and dental consultants were asked to review the proposals after the grantees were selected and the proposals reviewed at the national level.

provide technical assistance to the projects in planning and in writing their proposals.

3. Use of Health Start Models

The guidelines stated that "Applicants should be given some latitude in developing Health Start models. For purposes of providing a departure point, the following possible models are described:

"1. Model A. This would be a 4 to 8 week completely health oriented program that would be newly funded or a converted traditional summer program. In this model, children could devote 2 or 3 days a week to receiving health services; teachers would conduct health education programs one day a week for children and one day a week for parents. This model might be used in combination with a day camp, church group activity or other existing child care program.

"2. Model B. This would be a regular 8 week summer Head Start program with additional children added on for health services only.

"3. Model C. Modify a regular summer Head Start program. Cut it in half and serve a different group of children in each 4 week session.

"4. Regions may choose to develop other models than those described above. However, no 2 programs in a region should be based on the same model."

Two of the models have eight week intensive phases (Models B and C) and one model (A) presents an option of either a four or eight week program. Model A spells out a special health education component; Model B and C imply health education requirements (because of Head Start health education). Therefore, except for the time requirements, the applicants were given a great deal of latitude in what they could plan. The fourth option, the "elastic clause" allowing the development of additional models

at the discretion of the regions, seemed to be used by most of the projects. Some projects adopted modified versions of the three models presented in the guidelines, e.g., San Juan combined Models A and B: a four-week program (Model A), adding children for health services (Model B).

Model A refers to a "converted traditional summer program." Only one Head Start project - Hammond - converted to Health Start. Hammond, however, was not a "completely health oriented program" as Model A describes, but included regular Head Start activities and components.

4. Regional Plans

As was indicated above, the OCD Assistant Regional Directors were required to submit plans for the use of Health Start funds by March 5. The response to this requirement was apparently small. No one at the national office could determine with certainty how many plans were submitted, but the estimate was five or six. (None was retrieved.)

5. Selection of the Grantees

Representatives of all except one region (X) attended the headquarters-regional review of the proposals. The actual selection of the grantees took place at the regional level with pro forma approval coming from the headquarters-regional team. In fact, the individual regions selected the projects to be funded as well as amount allocated to them.[1/]

1/ The regional representatives with more than two proposals (i.e., all except Region IX) presented them in order of their preferences; effectively selecting those to be funded. A few changes were made in the proposals, but very few.

The guidelines did not specify criteria for selection but the Fact Sheet issued in March 1971 described the criteria for selection as "the soundness of the plan, its careful organization and flexibility, and its creative and innovative qualities." In addition, it stated that: "In selecting proposals for funding, an effort will be made to test a variety of models for delivering health care for children."[1/]

The regional offices used additional sets of criteria in the selection of grantees. Table IV-2 indicates the factors identified (during telephone interviews with the OCD regional staff assigned to Health Start) as being the determinants in the selection of the grantees. Eight of the regions planned some sort of variation by stipulating the populations to be served. In some regions the purpose was to choose children who did not have access to health services in addition to planning a variation of the types of grantees to be funded. Some regions chose the grantees based on the grantee's administrative strength or on the demonstrated ability to deliver health services effectively. In one region, the availability of local resources was a factor while in two other regions, the lack of resources was a requirement for selection. Four regions focused on the plans identified by the grantees by looking at services which would be provided, at per child costs, and for innovative approaches identifed to deliver health services. (We have not found an adequate definition of "innovative approaches.")

1/ See Appendix B.

TABLE IV-2 - REGIONAL AND IMPD CRITERIA FOR SELECTION OF GRANTEES

REGIONS / CRITERIA	I	II	III	IV	V	VI	VII	VIII	IX	X	IMPD
Population to be served	Indian Migrant	Migrant Rural	Urban Rural	Migrant		Rural Metro-politan		Rural	Urban Rural Spanish-speaking		Migrant
Characteristics of grantee			X	X		X					
Local resources			Available					Little Available	Little Available		
Types of services to be provided					X		X		X		
Cost per child					X						
Innovative Approaches							X				X
Need					X		X				
Other		Felt that national office committed them to fund 1 grantee								Same as Fact Sheet except grantees had to be in Oregon	

The regional offices took two approaches in selecting the grantees for Health Start: four regions solicited proposals; six regions and the Indian and Migrant Division pre-selected the grantees. Of the four regions that solicited proposals, two of them limited the number of grantees who would be allowed to submit proposals. In one case, a regional committee selected 20 grantees who were then asked to submit proposals; in another region, a determination was made that all the Health Start money would be spent in one state; therefore, only grantees in that State were eligible for funding from that region.

6. Funding the Projects

The guidelines required that the grants be out (from the regions) no later than June 1. Because the money did not go to the regions until May 25, the regional office had a difficult, if not impossible, task in meeting the June 1 deadline. The final CAP forms were not signed by most of the regional offices until the middle of June; then the projects had to wait up to 30 days for the governor's disapproval period to lapse. Thus, it is not surprising to find many projects (supposedly summer programs) starting in mid-July, August or even September. (See Table IV-3 for chronology of program development.)

D. The Projects

1. Planning and Proposals

The Health Start guidelines listed eight application requirements which the projects had to meet. They are:

(1) identify how they will execute the summer phase and indicate their capacity and plans for follow-up.

TABLE IV-1 - PROGRAM PLANNING AND IMPLEMENTATION SCHEDULE

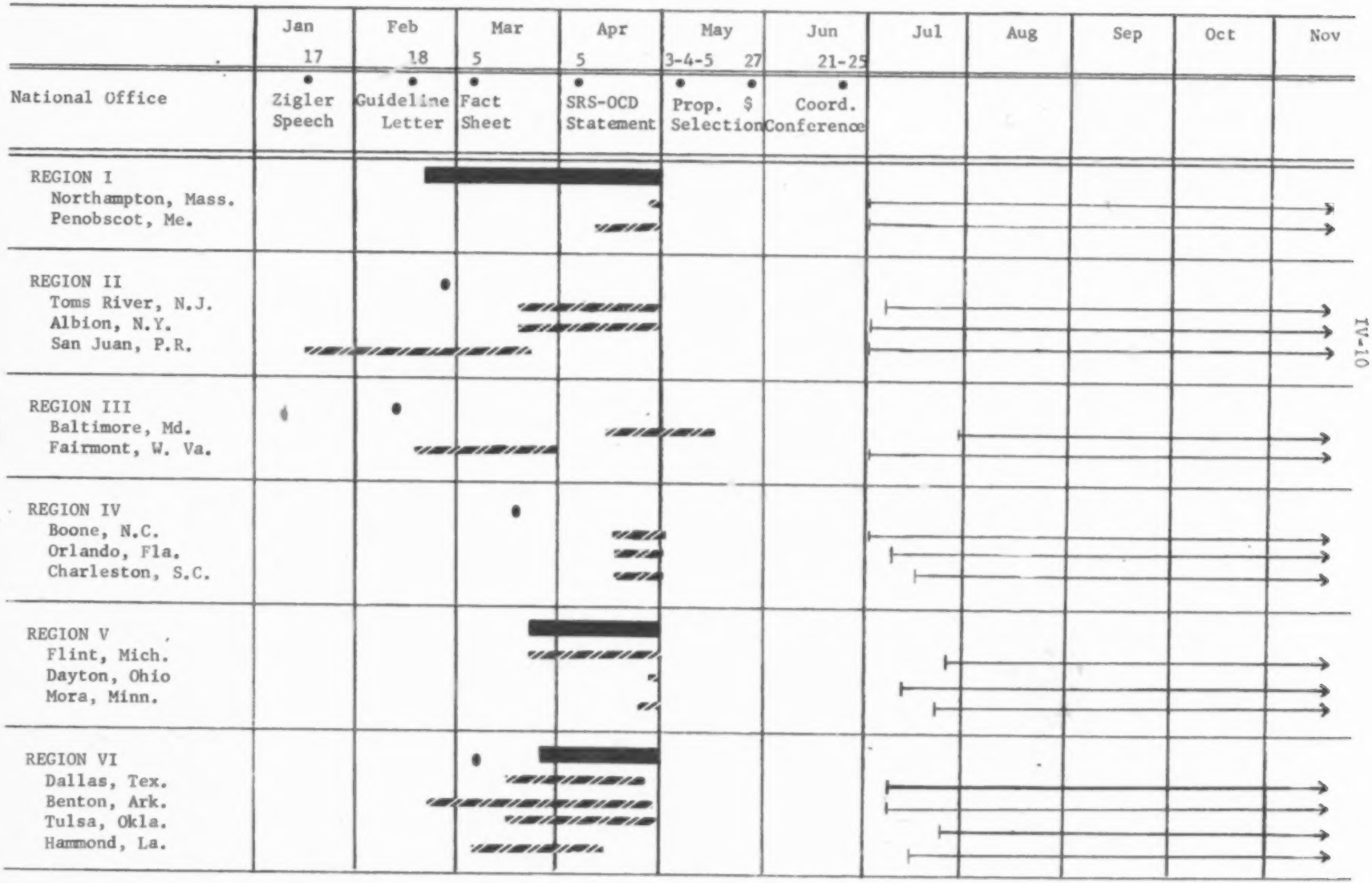
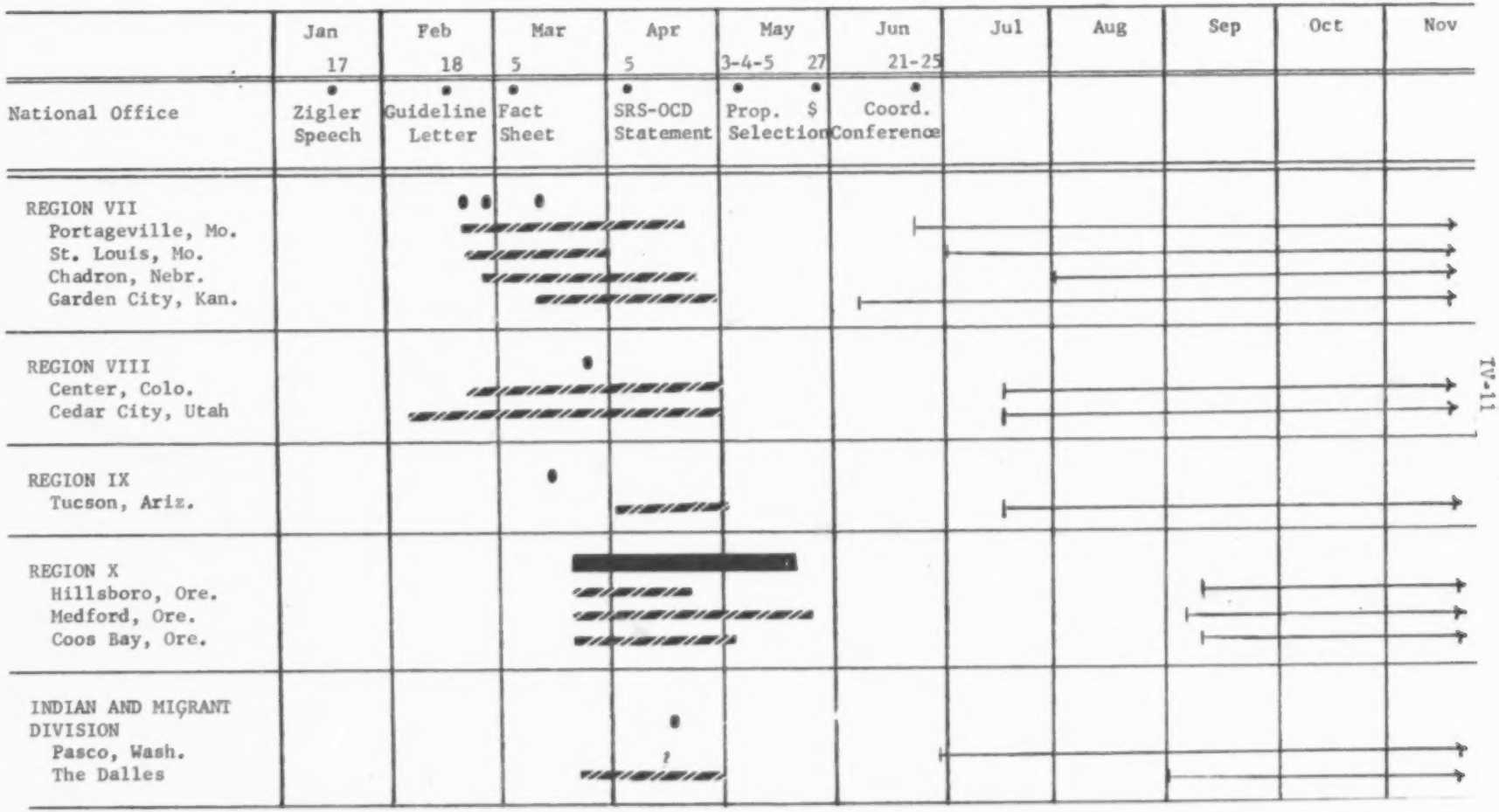


TABLE IV-3 - PROGRAM PLANNING AND IMPLEMENTATION SCHEDULE (Cont'd)



Legend:

- ● - Pre-selection of grantees.
- ▬ Period between soliciting of proposals and selecting grantees.
- ▨ Period between knowing eligible and submission of proposal.
- ⟶ Project start-up.
- $ - Release of funds to regions.

(2) indicate the role of the policy council in development and follow-up of the programs.

(3) involve medical and dental consultants, furnished through the region, in developing their programs.

(4) indicate how local health providers have been involved in the planning process. Such involvement of local health people is a must in planning.

(5) state how they intend to identify and serve a maximum number of children effectively.

(6) indicate how well they could maintain flexibility so that if they found they could take on more children part way in the program, they could do so.

(7) indicate how they would tie into existing resources to maximize value received for expenditures.

(8) submit, along with a narrative proposal, CAP forms 1, 25, 25a, 46 and 77.[1/]

Just as the national-regional selection procedure was pro forma, the "planning" at most of the projects merely involved writing a brief (or lengthy) narrative of the proposed effort, preparing a budget, and collecting signatures from providers on CAP Form 46.[2/] Few grantees presented detailed plans of operation or indicated flexibility to add more children than they stated they would serve.[3/] Planning was weak in

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1/ See Appendix A.

2/ The CAP 46 form, completed by local agencies, affirms that the agency was contacted, that the program complements the agency goals, and that the agency recommends that the proposal be approved. No actual agency support is promised.

3/ Penobscot, under pressure from OCD to reduce their per child cost, more than doubled the number of children they planned to enroll.

many projects and proposals often bore little relationship to the actual operations of the projects. (These problems will be discussed further in Chapter VII.)

2. Staff

The guidelines stated that "...each program must...obtain the service of a health coordinator for a full year. This individual should be a professional nurse with administrative, teaching and counseling ability. Should such a person be unavailable in the community, a licensed practical nurse or other qualified person might be substituted. In small programs not too distant from each other, one individual might serve two programs."[1/]

Of the 29 health coordinators, 21 were registered nurses, 11 of whom had previous public health experience. Of the eight coordinators who were not nurses, six had training and/or experience in health, two in education, and one extensive Head Start experience.

No project shared a coordinator with another Health Start project (although two projects split operations into two geographic areas and had two coordinators). The guidelines, of course, could refer to two different types of programs, for example, Health Start and Head Start. In that sense, ten projects had staffs who served in the same functions in the local Head Start. Six projects did not have year-round coordinators (even shared with Head Start) due to two resignations, one termination, two coordinators working 100% on Head Start (after the end of the intensive phase of Health Start) and one project ending in December.

1/ Ibid.

3. Administrative vs. Health Service Expenditures

The guidelines state that "it is expected that the bulk of the funds would be used for providing direct health services to children. Funds may be provided for transportation. There should be a minimum expenditure for administrative staff." There are no measures for "bulk" or "minimum" and the guidelines do not take into account the possibility of availability of non-Health Start "coordinated" resources, which could result in higher expenditures for personnel than for health services.[1/] Table IV-4 presents data for each project showing the end-of-the-year percentages of grant expenditures for personnel (a proxy for administrative costs since a fraction of a few Health Start staffs' time was spent on screening procedures), health services and other costs. The percentage of the total program for personnel cost was 45%, health services 35%, and other costs 20%.

4. Health Services

a. Required Screening, Diagnosis and Treatment

Services to be rendered must be comprehensive and include, as a minimum the following:

(1) screening

(2) physical exams

(3) immunizations

1/ It could be, in fact, that a project successful in coordination of resources would require a high percentage of staff time to do the coordination.

TABLE IV-4

PERCENT OF HEALTH START EXPENDITURES FOR PERSONNEL, HEALTH SERVICES AND OTHER COMPONENTS

	Percent Personnel	Percent Health Services	Percent Other
REGION I			
Northampton, Mass.	71	8	21
Penobscot, Me.	*49	19	32
REGION II			
Toms River, N.J.	43	27	30
Albion, N.Y.	75	4	21
San Juan, P.R.	41	47	12
REGION III			
Baltimore, Md.	87	12	1
Fairmont, W.Va.	77	18	5
REGION IV			
Boone, N.C.	**40	35	25
Orlando, Fla.	42	38	20
Charleston, S.C.	30	61	9
REGION V			
Flint, Mich.	55	36	9
Dayton, Ohio	* 9	77	14
Mora, Minn.	32	57	11
REGION VI			
Dallas, Tex.	25	74	1
Benton, Ark.	*36	47	17
Tulsa, Okla.	**58	9	33
Hammond, La.	*48	23	29
REGION VII			
Portageville, Mo.	* 0	70	30
St. Louis, Mo.	24	52	24
Chadron, Nebr.	34	47	19
Garden City, Kan.	*84	4	12
REGION VIII			
Center, Colo.	53	36	11
Cedar City, Utah	*56	36	8
REGION IX			
Tucson	9	70	21
REGION X			
Hillsboro, Ore.	*70	20	10
Medford, Ore.	53	22	25
Coos Bay, Ore.	*65	26	9
IMPD			
Pasco, Wash.	32	40	28
The Dalles, Ore.	39	35	26
Percentage of Total Program Costs	45	35	20

* - Some portion of staff time spent on screening.
** - High portion of staff time spent on screening.

(4) lab tests to include blood work; urinalysis; testing for intestinal parasites, sickle cell anemia and lead poisoning[1]/

(5) dental exam, prophylaxis and floride treatment

(6) vision and hearing testing

(7) diagnostic and treatment services for those children needing them . . ."

Performance data for all projects for each test are presented in Appendix D (showing enrollment; and for each test, percentage tested, percentage needing treatment and percentage of children who need no further treatment).

For each test, there are five states in which a child could be at the end of the program year: (1) tested and not needing treatment (OK); (2) tested, needing treatment but with treatment incomplete; (3) tested, needing treatment and completing the required care; (4) too young to be tested; and (5) not tested. Therefore, a child met a health service requirement if he was tested and found to need no treatment, tested, needed treatment and completed treatment (or placed in a continuous care or surveillance arrangement), or too young to need the test. Table IV-5 shows, for each test, the percent of children in the five states at the end of the program.

1/ The Fact Sheet (Appendix B) changed the language to make testing for intestinal parasites, sickle cell anemia and lead poisoning optional.

TABLE IV-5 - END OF YEAR DATA ON STATUS OF CHILDREN REGARDING HEALTH SERVICES

% of Children Enrolled	TEST (1) Tuberculin	(2) Hemat/Hemo	(3) Urinalysis	(4) Vision	(5) Hearing	(6) Medical Evaluation	(7) Dental Evaluation
(a) Tested/OK	63	68	69	57	54	59	35
(b) Tested/Needing Treatment/Not Completed	0.2	1	1	2	3	8	17
(c) Tested/Needing Treatment/ Completed	0.5	3	1	1	1	10	10
(d) Too Young to be Tested	-	-	-	8[1/]	8[1/]	-	22[2/]
(e) Not Tested	36	28	29	32	34	23	16
TOTAL	100	100	100	100	100	100	100
Meeting[3/] Program Requirement	63.5	71	70	66	63	69	67

1/ Includes children reported by projects to be too young for special screening test.
2/ Includes children reported by projects to be too young to require screening and the children calculated to be "too young" by the Urban Institute, i.e., under 36 months at the beginning of the program year.
3/ This row represents the children in rows (a), (c), (d): tested (if necessary) and completing required treatment.

Of the 9,945 children enrolled in the Health Start program, 63% received a tuberculin test; less than 1% of those tested needed treatment and 36% were not tested. Seventy-two percent received a blood test; four percent of those tested needed treatment and 3% completed treatment or are under care or surveillance. Seventy-one percent received urinalysis with only two percent needing treatment. Fewer children got vision tests (60%); 3% needed follow-up treatment; 8% were reported as too young to be tested. Of the 58% screened for hearing problems, 4% had abnormal tests and 3% were left incomplete. Seventy-eight percent of the children received medical screening or exams, 19% needed treatment and 10% needed and completed treatment. The highest incidence of problems both found and left untreated was in the dental area with 62% tested; 27% needing dental treatment and 17% of the children enrolled with treatment incomplete.

b. Optional Tests

Appendix D shows the optional tests given by the Health Start projects. All but one project (Pasco) gave additional screening tests to the children enrolled. Twenty-seven of the projects gave speech tests even though speech screening was not required. Nine projects gave one additional test; ten projects, two; seven projects, three; and two projects administered four optional tests to the children enrolled.

5. Coordination of Resources

This guideline requirement was discussed in Chapter III which addressed the program objectives.

6. Health Education

a. The Guidelines

The guidelines required, as part of the minimum services to be offered, "health education for parents and children as well as staff." The Fact Sheet[1/] circulated in March required the use of a new health education curriculum (developed by Bio-Dynamics, Incorporated). The Fact Sheet stated that:

> "A new and innovative health education curriculum will add to the effectiveness of the Health Start program. This new curriculum, originally developed for Head Start, will be used in all Health Start programs to teach the preschool children and their parents about the environment, the structure of the body, disease prevention and care, nutrition and other subjects that relate to the total development of the child. . . Health Start personnel will be trained to use this creative curriculum as a basic health education program that will add to the knowledge of the children and their parents and increase the value of the Health Start program for them."

b. The Results

Health education in the Health Start program turned out to be a variety of things in practice, most of which were directed at the children. We have distinguished three types of health education components: classroom instruction on a regular basis, organized lecture series or group discussions held at the time of the delivery of health services, and one-to-one instruction programs. In some cases what was called "health education" was delivered sporadically and casually on a very informal[2/] basis,(e.g., on the way to the doctor's office or in a five-minute discussion with the doctor or nurse at the time a health problem was identified). The last category was tabulated along with "none" unless the health education was given in a planned and organized manner.

1/ See Appendix B.
2/ By this term we mean not planned and organized by the project; not done on a systematic basis for all parents and children.

Table IV-6 shows that approximately 48% of the children were in projects given formal health education. Health education in a classroom setting was given to 32% of the children. (Over half of these were in the Hammond project, a converted summer Head Start.) Lectures in groups of various kinds accounted for the health education given to about 8% of the children, while 6% of the children were in projects giving only parent health education. Organized, carefully planned one-to-one instruction was given to about 4% of the children enrolled.

(1) Health Education for Children

Based on the status of the health education components at the time of the Urban Institute site visits and on subsequent information from the project sites, we find 15 projects as having health education components for children (see Table IV-7). Of the 15 projects, 10 used classroom models; however, at four of these classroom-oriented projects, classes were given to only a portion of the children. (Those four projects conducted two-phased programs, offering health education to only those enrolled in one phase.) Three of the 15 projects with an organized health education component used health aides to work with parents and children on a one-to-one basis through a series of home visits. Two of the 15 projects organized semi-classroom sessions at the time of the delivery of services to the children, e.g., at the clinic. Fourteen projects provided no health education to children in an organized manner.

TABLE IV-6

PERCENT OF CHILDREN IN TOTAL PROGRAM
WITH VARIOUS TYPES OF HEALTH EDUCATION

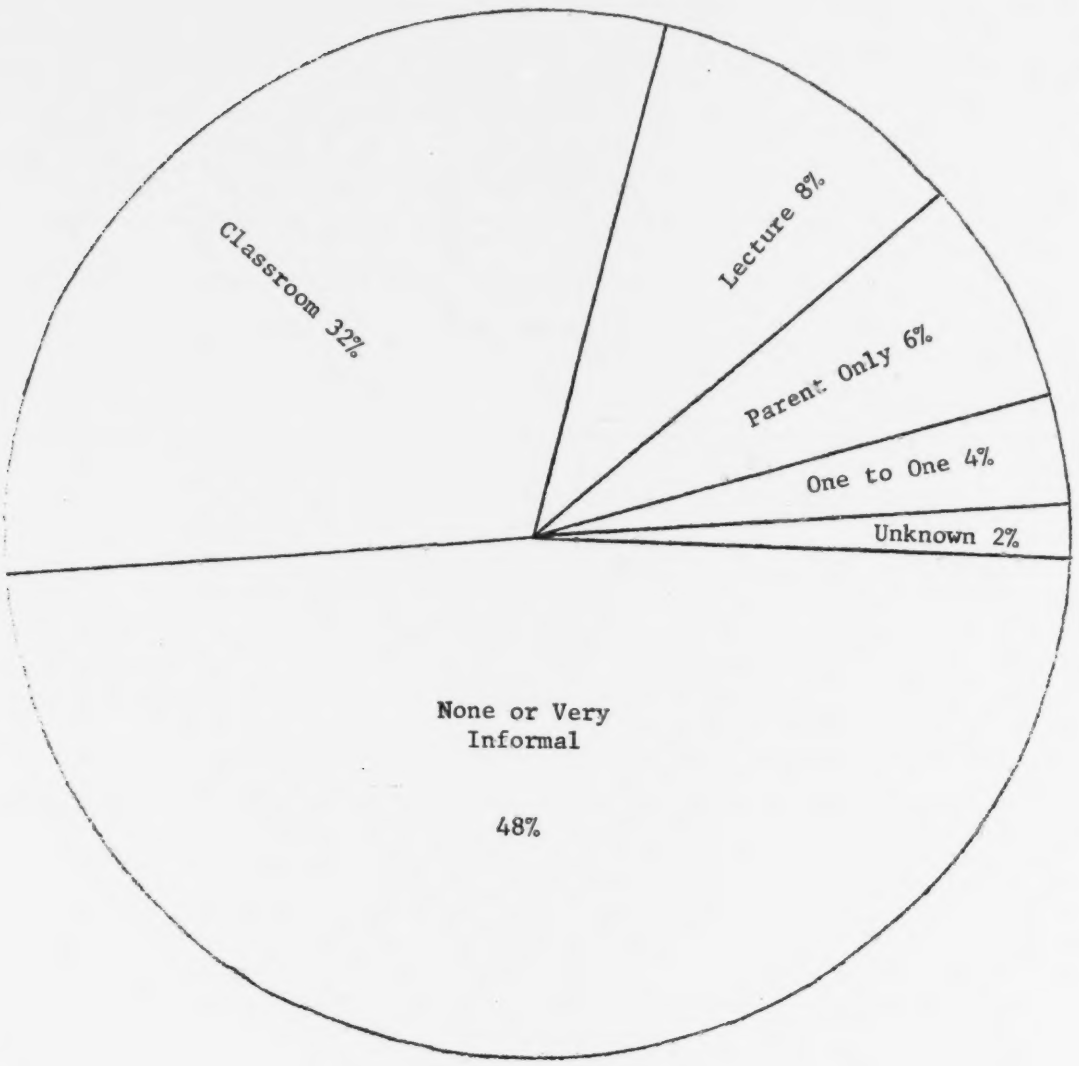


TABLE IV-7 - HEALTH EDUCATION COMPONENTS FOR ALL PROJECTS

REGIONS	SITE	Known Health Education Component	Class-Room	One-to-One	Lecture Series	None or Very Informal	No Data	Parents Only
I	Northampton, Ms.	X			X			
	Penobscot, Me.	X	X*					
II	Toms River, N.J.					X		
	Albion, N.Y.					X		
	San Juan, P.R.	X	X*					
III	Baltimore, Md.						X	
	Fairmont, W. Va.					X		
IV	Boone, N.C.					X		
	Orlando, Fla.					X		
	Charleston, S.C.					X		
V	Flint, Mich.	X	X					
	Dayton, Ohio					X		
	Mora, Minn.					X		
VI	Dallas, Tex.	X						X**
	Benton, Ark.	X			X			
	Tulsa, Okla.					X		
	Hammond, La.	X	X					
VII	Portageville, Mo.					X		
	St. Louis, Mo.	X	X					
	Chadron, Nebr.	X	X*					
	Garden City, Kan.	X	X					
VIII	Center, Colo.	X		X				
	Cedar City, Utah	X	X*					
IX	Tucson, Ariz.					X		
X	Hillsboro, Ore.	X		X				
	Medford, Ore.	X						X
	Coos Bay, Ore.	X		X				
XI	Pasco, Wash.	X	X					
	The Dalles, Ore.	X	X					

* Organized for a portion of children. ** AAP consultant reports indicated low parent turnout.

(2) Health Education for Parents

The area of health education for parents is more difficult to analyze. Many of the coordinators did not know exactly how health education for parents would be (or was being) conducted and what the percent of parent participation would be (or was). Therefore, we will not present project data for parent education. As indicated in Tables IV-6 and IV-7, however, two projects planned their health education component for parents only. In Region X, a special curriculum called "Child Care" (developed by Hollman-LaRoche, Inc.) was purchased with regional office funds to be used in the Medford project on home visits.

(3) Health Education for Health Start Staff

There were four possible ways that Health Start staffs could have received training: at the coordinators' conference held in Washington, D.C. in late June, through the Bio-Dynamics trainers who were to provide instruction on the use of the health education curriculum guide, through a training program organized by the regional office or through training sessions conducted by local agencies or organizations.

Of the 29 Health Start projects, 26 had their coordinators at the coordinators' conference. Eighteen sites were visited by a Bio-Dynamics trainer although training was not given at all sites visited,[1/] three projects in Region X participated in a dental workshop sponsored by the regional office, and at least two projects had an intensive aide training program.

1/ In one site, the trainer trained the Head Start staff, not the Health Start staff.

(4) The Use of the Healthy, That's Me Curriculum Guide[1/]

Only 14 projects seem to have considered the use of this curriculum guide. Because of many problems that resulted from the design, circulation and training program for the Healthy, That's Me curriculum guide, only one used it fully. In some cases the coordinators chose not to use the curriculum guide because they felt it was not applicable to the program model they were using or the children they were serving. Others were forced to abandon the idea of using the curriculum guide because the materials arrived too late for their use. Four projects used it as a resource and six planned or are using one or more units of the curriculum guide either in the classroom or as a resource. St. Louis designed a health curriculum of their own; but was able to use some parts of the Healthy, That's Me materials.

1/ Dorothy D. Harrison, Ph.D. Healthy, That's Me, A Health Education Curriculum Guide for Head Start. Washington: U.S. Department of Health, Education and Welfare. (No date.)

V. ASSESSMENT OF HEALTH START PROJECTS: PLAN VS. PERFORMANCE

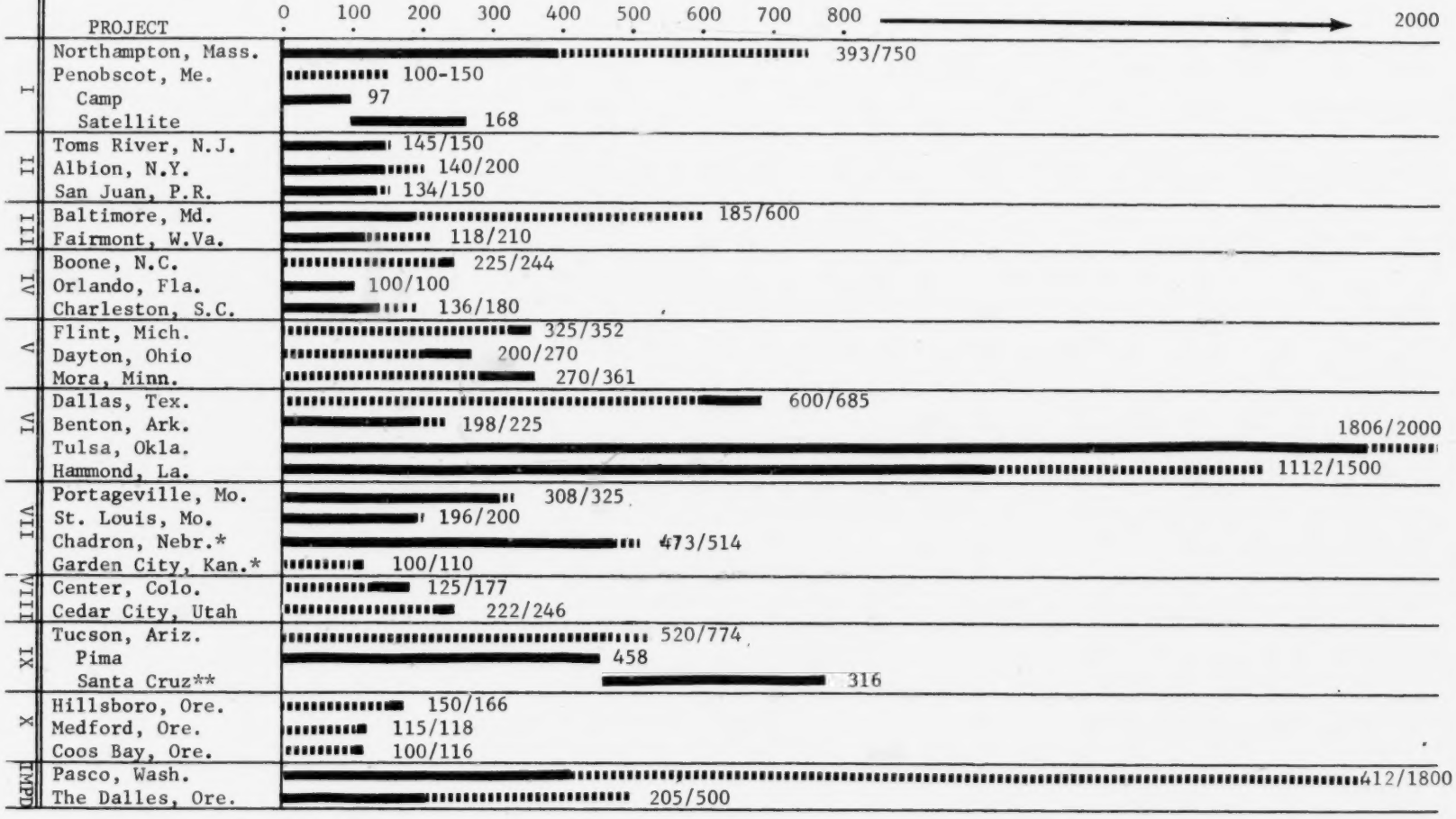
This chapter will briefly show how well the projects performed based on what they planned. Because the regions funded some projects that did not plan to include all required components, we will show for three areas (enrollment, health services and health education) what the projects planned and whether they followed through on their plans. It is important to note that some plans were unrealistic and probably impossible to follow given the resources (staff and money) available to the projects and, in some cases, the difficulty of finding children to enroll.

A. Enrollment

Table V-1 shows planned and actual enrollment for each site.1/ Coos Bay, Garden City and Orlando planned the smallest projects (100 children); the largest project planned was Tulsa (the multiphasic screening project) with 2000 children. The projects varied greatly in meeting the planned enrollment figures. Orlando remained the smallest project at 100 children and Tulsa the largest with 1806. One project more than doubled the planned enrollment (Penobscot), and Tucson enrolled over 60% more than was planned. Pasco and Baltimore only enrolled one-third of the children planned; Northampton and The Dalles only reached one-half of the projected enrollment.

1/ The enrollment data were taken from June 15 Control Sheets, unless they were not reported. For those projects not reporting, the last report submitted was used.

TABLE V-1 - ACTUAL/PLANNED ENROLLMENT OF HEALTH START CENTERS BY REGION



Planned Enrollment

Actual Enrollment

* December data; no other data reported.

** March data.

B. Cost per Child

Table V-2 shows the grant size for each project, the planned cost per child, the actual OCD cost per child and the percent of the grant that was unexpended. Projects planned and actual costs per child varied widely (seemingly bearing little resemblance to the services available in their locality or the size of the projects).

We have indicated the percent of unexpended funds to show that the level of expenditures had little connection with either planned costs or accurate estimates of children to be enrolled and served. There were projects that decreased the per child cost and still had considerable funds left over (e.g., Charleston, Flint, Dayton, Dallas, Cedar City and The Dalles) due primarily to lack of completed health services and probably attempts to serve too many children for the staff available.[1/] Some projects drastically increased the actual per child cost over the planned, again with money left over. For example, Northampton, Baltimore, and Fairmont fell far short of the enrollment and, in addition, had low completion rates for health services. Some of the projects we considered more successful than others in providing health services (see Chapter IV) were able to decrease their planned cost per child, e.g., San Juan, Dallas, Tulsa, Center and Hillsboro. What is obvious from these data is that planning was a weakness, both at the project level (in that cost estimates seemed to bear little resemblance to actual expenditures) and at the

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1/ Coos Bay does not fit this pattern completely. The costs did go down, services were not complete, but the number enrolled (100) was not unmanageable for a staff of three.

TABLE V-2 - PLANNED AND ACTUAL COST PER CHILD

SITE	Grant Size	Planned Cost/Child	Actual Cost/Child	Increase Or Decrease	Grant % Unexpended
REGION I					
Northampton, Mass.	$37,500	$ 50	$ 94	+88%	1%
Penobscot, Me.	37,900	379-252	138	-44	3
REGION II					
Toms River, N.J.	20,000	133	120	-10	13
Albion, N.Y.	25,000	125	137	+10	23
San Juan, P.R.	29,400	196	122	-38	44
REGION III					
Baltimore, Md.	40,000	67	97	+45	55
Fairmont, W. Va.	35,000	167	199	+19	33
REGION IV					
Boone, N.C.	25,000	100	102	+ 2	.002
Orlando, Fla.	25,000	250	243	- 3	3
Charleston, S.C.	25,000	139	76	-45	59
REGION V					
Flint, Mich.	45,200	139	93	-33	27
Dayton, Ohio	21,800	109	23	-79	72
Mora, Minn.	22,600	84	63	-25	0
REGION VI					
Dallas, Tex.	45,000	75	39	-48	40
Benton, Ark.	30,000	133	135	+ 2	11
Tulsa, Okla.	48,000	24	22	- 8	19
Hammond, La.	251,500	167	217	+30	4
REGION VII					
Portageville, Mo.	25,000	77	81	+ 5	0
St. Louis, Mo.	25,000	125	126	+ 1	1
Chadron, Nebr.	25,000	49	44	-10	16
Garden City, Kan.	25,000	250	226	-10	.004
REGION VIII					
Center, Colo.	40,000	320	226	-29	0
Cedar City, Utah	57,500	259	130	-50	44
REGION IX					
Tucson, Ariz.	75,000	144	97	-48	0
REGION X					
Hillsboro, Ore.	38,100	254	200	-27	13
Medford, Ore.	24,800	216	166	-23	21
Coos Bay, Ore.	26,100	261	156	-40	31
IMPD					
Pasco, Wash.	40,000	22	93	+323	4
The Dalles, Ore.	39,700	79	75	- 5	61
	1,205,200				

regional level (because money was allocated to projects without considering the costs of the program or knowing whether resources were available to be coordinated).

C. Health Services and Health Education

Fourteen projects out of 29 gave all the required health services (at least to a portion of the children) and some form of an organized health education component. Those projects that did not include required components - either planned or not planned are shown on Table V-3. The component given the least attention was health education, with 15 projects either eliminating it or offering it in a very informal manner.

TABLE V-3 - HEALTH SERVICES AND HEALTH EDUCATION PLANNED AND GIVEN

SITE	All Required Services Planned/Provided	Required Services Planned/ Not Given*	Required Services Not Planned/ Not Given*
REGION I			
Northampton, Mass.	X		
Penobscot Me.			
(Camp)	X		
(Satellite)			Health Education
REGION II			
Toms River, N.J.		Health Education	
Albion, N.Y.		Health Education	
San Juan, P.R.		Hearing Screening	
REGION III			
Baltimore, Md.		Medical Exams	Health Education
Fairmont, W.Va.			Health Education
REGION IV			
Boone, N.C.		Health Education	
Orlando, Fla.		Health Education	
Charleston, S.C.		Health Education	
REGION V			
Flint, Mich.	X		
Dayton, Ohio		Health Education	
Mora, Minn.		Health Education	
REGION VI			
Dallas, Tex.	X		
Benton, Ark.	X		
Tulsa, Okla.		Health Education	
Hammond, La.	X		
REGION VII			
Portageville, Mo.		Health Education	
St. Louis, Mo.	X		
Chadron, Nebr.	X		
Garden City, Kan.	X		
REGION VIII			
Center, Colo.	X		
Cedar City, Utah	X		
REGION IX			
Tucson			
(Pima)		Health Education	
(Santa Cruz)		Health Education	TB & Blood Tests
REGION X			
Hillsboro, Ore.	X		
Medford, Ore.	X		
Coos Bay, Ore.		Dental Exams	
IMPD			
Pasco, Wash.	X		
The Dalles, Ore.	X		

* Included in these categories are projects which had only very informal health education components.

VI. TECHNICAL ASSISTANCE PROVIDED TO THE PROJECTS

A. OCD Headquarters Staff

As was mentioned in Chapter IV the headquarters staff provided a limited amount of technical assistance on request, mainly the interpretation of the guidelines to regional offices and projects.

B. OCD Regional Office Staffs

Because the guidelines did not require the regions to provide technical assistance to the projects and because of staff overload in the regions,[1/] technical assistance from the regional offices to the projects was spotty.

C. American Academy of Pediatrics

The American Academy of Pediatrics (AAP), as a part of its contract with OCD, provided technical assistance to the Health Start projects. There was no formal agreement on the number of visits (or contacts to be made); however, each project was to be assigned an AAP consultant.[2/] At the request of the Urban Institute, the site visit reports were mailed to the evaluators after they were sent to the AAP headquarters. Table VI-1 shows the dates of the site visits, the evaluations, problems identified and strengths of the projects. Some of the problems mentioned by the consultants were also observed by the Urban Institute. Some of the problems were eliminated or minimized (e.g., the

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1/ As reported by the regions.

2/ Except Northampton; Massachusetts has a technical assistance contract with Massachusetts Public Health Research Institutes, Inc.

TABLE VI-1 - AMERICAN ACADEMY OF PEDIATRICS REPORTS ON HEALTH START PROJECTS

SITE	DATE SITE VISIT	EVALUATION[2] A	B	C	PROBLEMS	STRENGTHS
Northampton, Mass. Penobscot, Me.	[1] 8/71					Excellent pilot program
Toms River, N.J.	5/72		X		No hearing, urinalysis. No space for ed., need health aides.	Lab screening, immunization
Albion, N.Y.	?				Communication with the CAA	
San Juan, P.R.	no data					
Baltimore, Md. Fairmont, W.Va.	3/71 9/72		X			
Boone, N.C.	3/71	X			Parent health ed. Better dental program.	
Orlando, Fla.	1/72	X				
Charleston, S.C.	?				Administration	High quality service at a reasonable cost.
Flint, Mich.	7/71				Funding delay, late staffing, poor health ed. attendance	
Dayton, Ohio	10/71		X		Poor coordination and health education	"Good care"
Mora, Minn.	no data					
Dallas, Texas	1/72				Low parent attendance on health education	
Benton, Ark.	no data					
Tulsa, Okla.	4/72	X				Outstanding program
Hammond, La.	7/71			X	Late hiring, insufficient funds poor record kpg.	
Portageville, Mo. St. Louis, Mo.	7/71 8/71		X			
Chadron, Nebr.	7/71				No blood tests, insufficient funds	
Garden City, Kan.	no data					

TABLE VI-1 - AMERICAN ACADEMY OF PEDIATRICS REPORTS ON HEALTH START PROJECTS (Cont'd)

SITE	DATE SITE VISIT	EVALUATION[2] A	B	C	PROBLEMS	STRENGTHS
Center, Col.	no data					
Cedar City, Utah	?				Not enough children, poor administration	
Tucson, Arizona	9/71				Lack of resources, personnel problems	
Hillsboro, Ore.	2/72		X			"OK"
Medford, Ore.	2/72	X			Poor turnout for parent education	
Coos Bay, Ore.	10/71	X			Need more MD's participation in program	Good educational component
Pasco, Wash.	5/72		X		Need coordination of facilities available	Will serve other family members
The Dalles, Ore.	no data					

1/ No AAP Consultants in Massachusetts.

2/ A = Working well and will require little further consultation effort.
B = Generally satisfactory but in need of substantial local (and consultant) effort.
C = Definitely inadequate to meet Head Start Health Goals and in need of major reorientation, planning and effort.

dental problem in Boone, the personnel problem in Tucson), possibly due to the technical assistance from AAP.

D. U.S. Public Health Service Dental Consultants

The USPHS dental service also has a contract with OCD to provide technical assistance to its programs, Health Start being one of them. The reports from the dental consultants contain more useful information about the status of the projects than do the AAP reports. Most of dental reports indicate the purpose of the memo or visit, problems they found, and action steps to be taken either by them or the projects. Reports were available for 20 projects.[1/]

Because the reports were quite specific and difficult to summarize, the body of one of the reports to the regional OCD office is presented here to show the level of detail and an example of recommended action steps.

> "The treatment portion of the program is functioning reasonably well, although the administrative records system seems to be somewhat unwieldy. Once treatment starts, the staff claim to have no difficulty in keeping track of each child's treatment status and scheduled appointments in order to ensure that appointments are kept and that the children complete treatment. As long as the system works, there is no need to recommend additional changes beyond those suggested by you and . . . during your recent visit
>
> "One difficulty in the treatment program has resulted from efforts to encourage parents to assume responsibility for scheduling appointment for their children. Some children have not received appointments and a time lapse has occurred during which the staff was unaware of whether or not initial appointments had been scheduled. This is of particular concern since appointments in this rural area are generally

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1/ The projects for which there were no reports are: Toms River, Portageville, St. Louis, Chadron, Garden City, Center, Cedar City, Pasco and The Dalles. Of those projects, we know that the following projects had contact (either by telephone or site visit) with their dental consultants: Toms River, Portageville, Chadron, Garden City and Cedar City. The St. Louis project had its own dental consultant; The Dalles and Pasco did not have dental consultants assigned to them.

scheduled months in advance and delays then become critical. It is important to continue encouraging parents to assume this responsibility, but appointments should also be scheduled in a timely manner. To overcome this difficulty, I recommended that parents simply be asked to schedule their appointments by a certain date and to notify the staff regarding the dentist selected and the appointment dates. Staff will then know which parents need additional motivation early enough to be of assistance.

"Another problem is some difficulty in obtaining appointments. This is not unusual, however, because of the limited number of dentists in this area. It was suggested that if this problem becomes more severe, the program should explore the possibility of requesting assignment of a dentist through the National Health Service Corps. The Corps has 75 dentists available for placement before July 1972. Assistance in requesting a dentist can be provided by Dr. . . . or myself.

"An additional factor concerning the treatment program is that Title XIX has not been utilized to its fullest potential. The [State] Title XIX program is quite broad and should cover nearly every Health Start family. Families have been encouraged to enroll in the Title XIX program and these benefits have been utilized for enrolled families. The majority of families, however, have chosen not to apply for Title XIX and as a result Health Start funds have been used to pay for their dental services. Health Start funds are considered a last dollar resource and encouragement of families to utilize existing resources is in accordance with Health Start philosophy. Whether or not eligible parents should be required to utilize Title XIX for dental services, however, is a matter of policy that should be determined by OCD.

"One last comment concerning the treatment program is that space maintainers are being routinely provided. It was suggested that participating dentists be asked to evaluate each child individually before providing space maintainers and to take into consideration the likelihood of the child returning for follow-up and timely removal of the appliance.

"Adequate supplies have been purchased to conduct a dental health education program based on plaque control. Unfortunately, the program has not been fully implemented because a hygienist from the [State] . . . Department of Health advised against the use of floss. Efforts will be made to coordinate future consultation to avoid conflicting recommendations. During my visit, arrangements were made for Health Start staff to participate in a five appointment plaque control program to be taught by Dr. . . . in his private office. Dr. . . . has also agreed to work with the staff in developing a method of incorporating plaque control into parent meetings and home visits on a continuing basis. Parents can then be taught how to effectively clean their children's teeth through flossing and brushing.

///

"A third site visit should be appropriate in about two months to review the dental health education program."

E. Region X Dental Activities

Without question, the best type of technical assistance given to the Health Start projects was provided to the three Health Start projects in Region X. The OCD regional office supported (with regional funds) a three-day workshop prepared by the Bureau of Health Education Manpower Education, NIH, to train the entire staffs of the three projects. The workshop's theme was preventive dental education; topics of discussion included the importance of oral health, tooth development, etiology of common dental diseases, nutrition, fluorides, oral hygiene and teaching techniques for both parents and children. At the end of the workshop, dental resources were analyzed and materials and information were presented on potential resources. The general reaction from the three project staffs at the time of the Urban Institute site visits was quite favorable, and evidence of the training was obvious in at least two sites with plaque prevention programs being conducted in the homes.

As a part of the preparation for the workshop, each of the three communities was visited, and profiles of resources available to the communities were prepared and distributed to the projects. Follow-up visits were made to each project to determine the success of the dental education component and assess the dental services being given.

VII. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

1. Impact of the Health Start Program

Even though the first year evaluation did not include the use of control groups (to determine what would have happened in the absence of the program), it is reasonable to estimate that the health services given to the children enrolled in the Health Start program would not have been given without Health Start (due to limited local budgets and systems for health services delivery for economically deprived preschool children). Of the 2945 children enrolled in the first year program, 78% received medical examinations and 62% received dental examinations.

It can be assumed that change in the health status of the children enrolled can be attributed to the services given in the Health Start program (again given local budget and service limitations). Of the children receiving medical examinations 24% of them needed treatment, and of those needing treatment 56% completed treatment. Of those receiving dental examinations 44% needed dental treatment, and of those needing treatment, 38% completed treatment. Of the 63% receiving a tuberculin test, only 1% had a positive finding and of the 73% having a blood test, 27% had an abnormal reading. Fifty-eight percent of the children enrolled were screened for hearing problems. Of those tested 6% needed treatment and of those needing treatment, only 27% completed treatment. Of the

60% who were screened for vision problems, 6% needed treatment, and of those 37% completed treatment.

2. Relationship of Project Results to Project Characteristics

Due to wide variations among projects, both in results and project characteristics, few conclusions can be reached about project characteristics which can predict project success. Of the 14 variables examined, only five showed some indication of being related to overall project success. Project success appears to have been related to: (1) health coordinators who were nurses, (2) higher program costs, (3) staffs rated high on administrative skills, and (4) high proportion of children who needed treatment (a possible indicator of thoroughness of testing). On the other hand, projects having a high proportion of migrant children did considerably worse than other projects in providing health services to those enrolled, even though migrant children were found generally to have had more health problems.

3. Meeting Program Objectives

The Health Start program had mixed results in meeting the program objectives. The first stated objective was to increase the number of children receiving Head-Start like health services. Because the cost per child in Health Start was considerably lower than the cost per child in Head Start, more children received health services in Health Start than would have received health services in Head Start (for the same OCD dollars).

Little can be said about the second objective about providing health services in areas of limited health resources, because of lack of available data about existence of health resources in the Health Start communities. One project easily identified as having few health resources was able to successfully provide health services to the children enrolled

by importing service providers, exporting children and "coordinating" (using) outside resources.

Individual Health Start projects were probably more successful in meeting the third guideline requirement (working with other federal, state and local resources), than were the national or regional office staffs. Even though projects were not able to retrieve specific data on number and costs of "coordinated" resources, we know (based on our site visits and on Health Start expenditure data) that many projects "coordinated" (used) outside health resources. No commitments in terms of funds or services resulted from the national effort at coordination of SRS and HSMHA resources, and OCD regional offices had limited success in obtaining support, in terms of services, for the Health Start projects.

4. Administrative Structure of the Program

In the interim report[1/] the major problem (weakness) addressed was the lack of administrative structure for the program. Almost all of the responsibility and accountability in the Health Start program was at the project level. However, a full-time national Health Start director has been appointed to run the second year program. Also, attempts were made at the second year health coordinators' conference to involve OCD and other HEW regional offices more directly in the operation of the program.

5. Planning

At this point, with end-of-the-year performance and expenditure data, it is safe to conclude that one of the major problems at the

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1/ See Joe N. Nay et al. "Health Start: Interim Analysis and Report." The Urban Institute, WP 961-2, January 3, 1972

national, regional and project levels was a lack of planning to prepare for a demonstration program. Chapter IV addresses the contradictory nature of the rather broad guideline requirements. Little planning was done at headquarters level to determine what is feasible (given resource and time constraints) or, indeed, what hypotheses were to be tested. The national meetings to plan the program did not yield any specific support (in terms of additional funds or resources) from any other agencies. Proposals were written and projects were funded in some cases without a sound plan.

6. Project Start-Up

There were several factors that resulted in time lags from the time the guidelines were sent to the ARDs until the project started operations. Some of them included: delays in notification of potential grantees of the existence of Health Start, development of regional plans, selection of grantees, transmittal of funds from the national office to the regional offices and the regional offices to the projects. At the project level, late hiring of some coordinators and use of outdated outreach lists held up recruitment. In some cases, the loss of time probably affected project performance.

7. Project Management

Many projects suffered from a lack of an organized system to schedule and keep track of appointments, to determine when transportation was needed, to set priorities for services and limited funds. In one case, the management problems were so severe that at the end of the year children needing treatment were left untreated (due to lack of advanced scheduling of appointments) even though money was left in the budget.

8. Serving Migrants

Twelve of the 29 projects enrolled migrant children. Problems consistently were uncovered in the field visits about the difficulty in completing treatment of migrant children in the short period migrants were in the Health Start area and the lack of future care arrangements available for migrant children. The migrant children received considerably less health service than the other Health Start children.

9. Health Education

The one required component that was excluded most often from the Health Start projects was organized health education for parents and children. Eleven projects gave no health education or offered instruction in an informal (not planned) manner at the time of screening or while transporting the children to service providers. Health education for parents was especially weak in most projects. Promising approaches (yet not necessarily innovative) were taken by three projects that provided health education for parents on a one-to-one basis in the home.

Even though the Healthy, That's Me curriculum guide was offered to all Health Start projects, only 15 projects reported using it, 14 as a resource and one project using it fully.

10. Record Transmittal and Future Care

Because many projects addressed problems as they arose, little emphasis was given to the future care of the children, even though the guidelines required it. Except for the children going directly to school (or to Head Start), there was little attention given to what would happen to the health records of the children enrolled or future care

arrangements for the children. As was mentioned earlier, a particular problem was encountered in attempting to insure follow-up care for migrant children.

11. Technical Assistance to Projects

Technical assistance offered to projects was spotty. Even though almost all projects were visited by AAP consultants, it is unclear whether the consultants were fully aware of the thrust of the program. In fact, they did not even receive copies of the Health Start guidelines. Many apparently thought that Health Start was like summer Head Start (minus certain components).

The dental consultants, on the other hand, were not required to monitor the Health Start projects; therefore, technical assistance from the USPHS dental consultants was offered on requests from the projects. Most of the dental consultant reports indicated recommended action steps for the problems encountered. The regional dental workshops seemed well received by the project staff that attended.

12. Costs

In the interim report "nominal costs" for a Health Start project meeting all guideline requirements were estimated to be $200 per child. In doing the cost analysis for the six projects with usable data (OCD grant expenditures and value of coordinated resources), it appears that the actual cost (OCD plus other agency costs) is somewhere between $180/child and $220/child. OCD funded projects ranging from $22/child to $300/child. It is worth noting that completion rates for health services had only low (positive) correlations with costs of health services. The low correlation could result from other variables: coqrdination of services or the amount of the grant expended. Because over one-fifth

of the money for the Health Start program was not used and because many projects with low completion rates either turned back or carried over funds, cost did not consistently or constantly affect performance. (See Figure VII-1 for relationship of cost and performance data for the Health Start projects.)

B. Recommendations

1. The Headquarters Staff

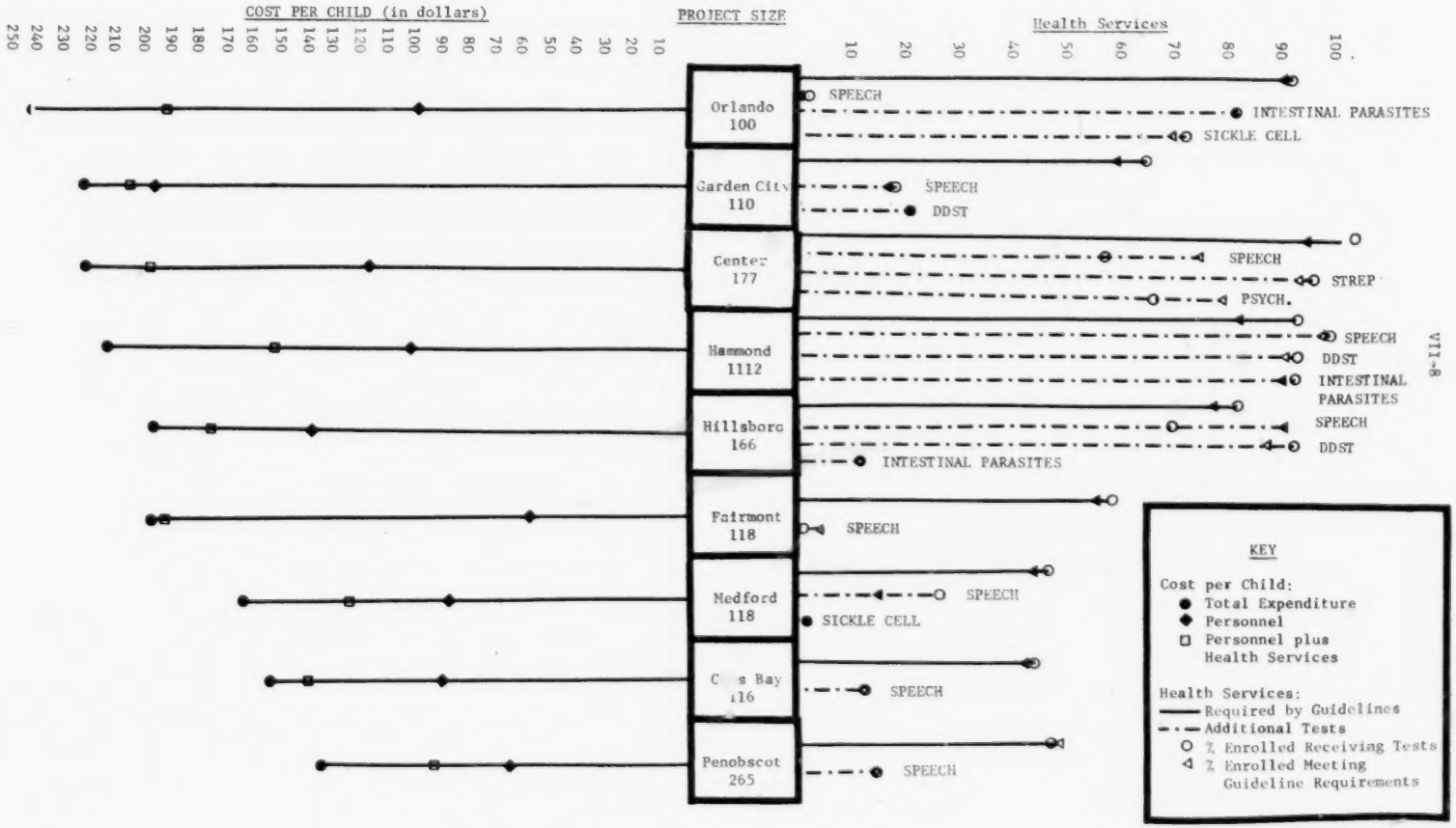
a. The national Health Start director should provide the OCD regional office staff with information on the problems that have been identified through the evaluation contractor's monitoring of the Health Start projects. He should offer information to projects on federal programs that can be used for delivery of health services for economically deprived preschool children. He should also offer technical assistance to regional office staffs and projects on the interpretation of guideline requirements.

b. If the Health Start program is continued, projects should be required to have a nurse as health coordinator.

c. If a Health Start program is planned for the third year, projects should be funded only if the total program cost, including "coordinated" resources not paid for by Health Start, is approximatly $200 per child. If agencies applying for Health Start grants are not in areas of limited resources, a special requirement should be placed on those agencies to show that with the grant funds plus "coordinated" resources, per child cost would be approximately $200 per child unless there are significant economies of scale.

d. The Urban Institute strongly recommends the adoption of a planned variation approach for the third year program - if a third

FIGURE VII-1 - COST AND PERFORMANCE DATA FOR ALL PROJECTS



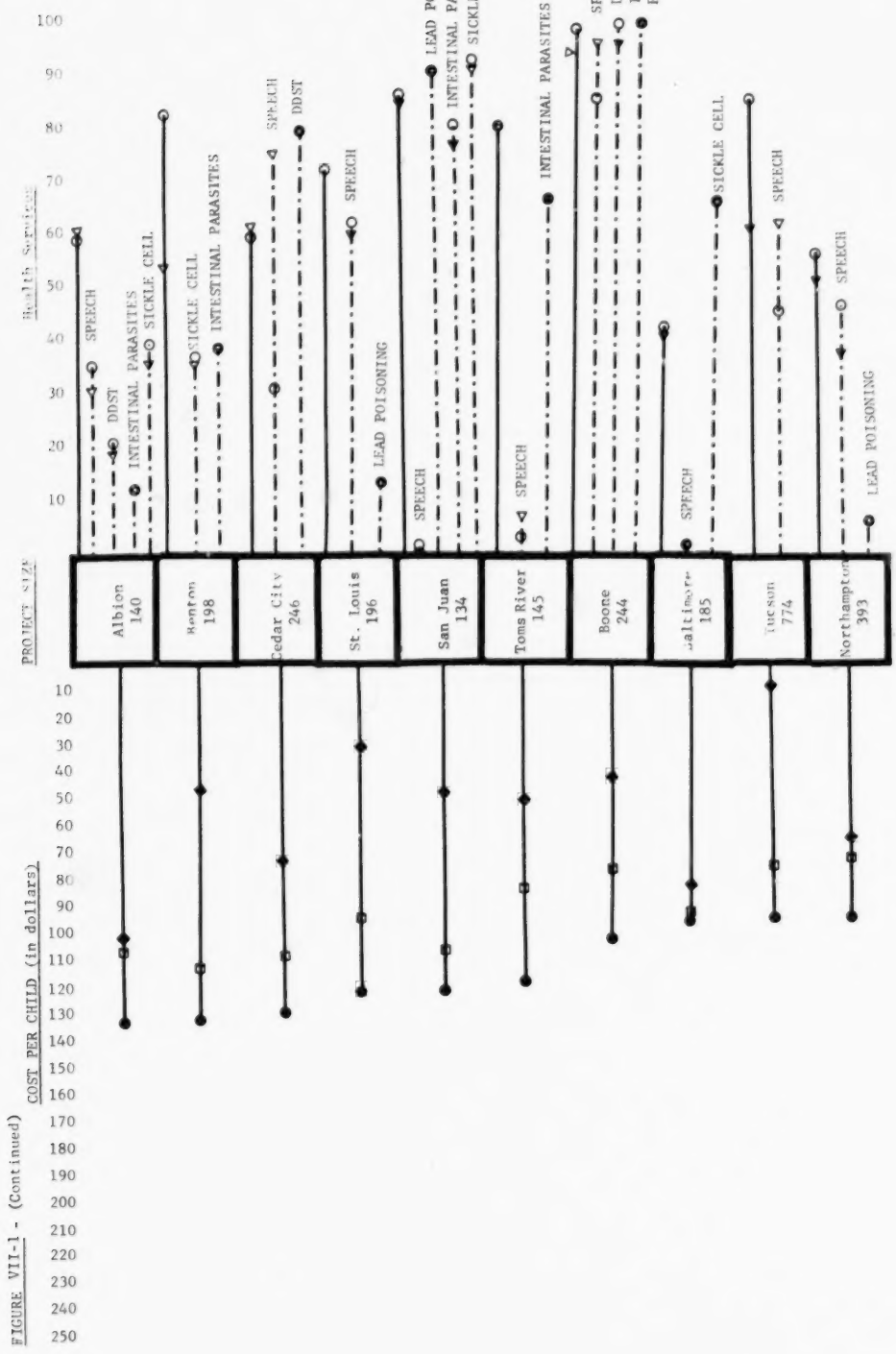


FIGURE VII-1 - (Continued)

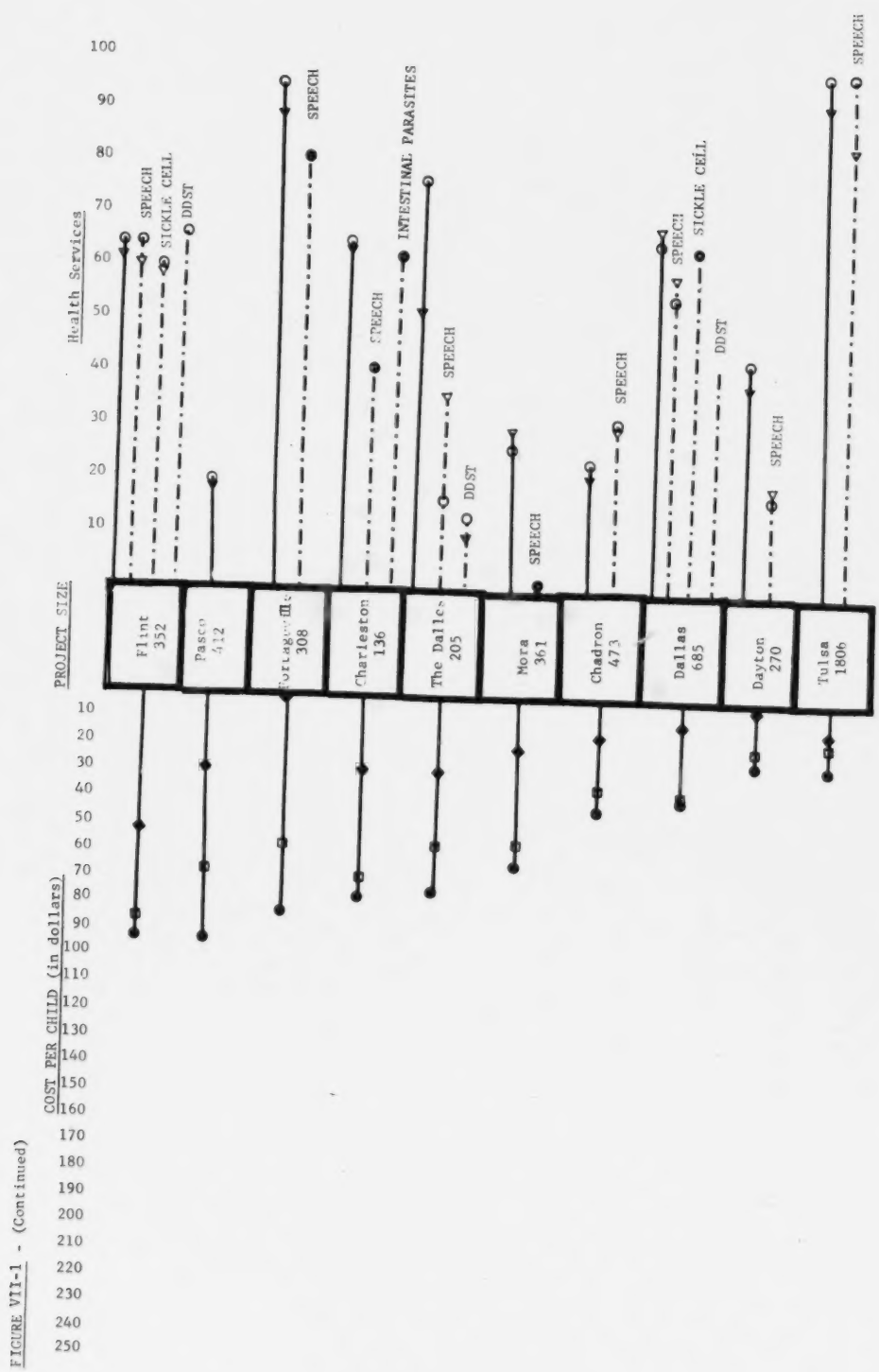


FIGURE VII-1 - (Continued)

year Health Start program is planned. It is assumed that more data will develop from the second year with the variation that is likely to occur among projects. These data along with the first year data should be helpful in developing models to be tested in a third year program. At this point, OCD may want to test alternative detection schemes using paraprofessionals. Alternative health education approaches could be tested (e.g., home instruction and group health instruction to various settings). Also, various approaches to coordination of resources could be tried, with some projects receiving extensive technical assistance from OCD and other projects receiving none.

e. If a third year program is planned, specific hypotheses should be tested and the program should have a specific design. As was recommended by the Urban Institute at an earlier date, the program should be administered from the national office and projects should be selected centrally to ensure that an appropriate mix of projects are funded in accordance with an overall design.

f. If a third year program is planned, a special model (or models) should be developed for migrant populations to ensure that their treatment is not left incomplete.

2. The Regional Office Staffs

The OCD regional offices under the current administrative structure of the Health Start program should monitor the activities of the Health Start projects in their regions. This possibly can be done while visiting other OCD grantees or can be assigned to the AAP health liaison specialist in the regional office. The health liaison specialist, hired to provide a variety of assistance to OCD grantees, should offer special assistance to the Health Start projects because of the demonstration nature of the Health Start program.

APPENDIX A

Memorandum To Assistant Regional Directors From
Edward Zigler, Director, Office of Child Development,
February 18, 1971

OPTIONAL FORM NO. 10
MAY 1962 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

TO : Assistant Regional Directors

DATE: February 18, 1971

FROM : Edward Zigler EZ
Director, Office of Child Development

SUBJECT: Health Start Program Summer 1971

Enclosed are guidelines for the 1971 Summer Health Start program as discussed at the ARD meeting on 11 February. As stated at that meeting, the emphasis in the summer program will be on providing effective health services to large numbers of children not presently served by Head Start. Your program should be developed according to the established guidelines, allowing some variations deemed necessary by regional office staff.

I urge you to solicit support, for the Health Start program, from other HEW components such as HSMA (particularly Maternal and Child Health); Medicaid (Title XIX), and OEO Neighborhood Health Centers. Presently, Medicaid's regulations on screening, diagnosis and treatment of individuals under 21 are being developed. Once they are finalized and issued to the States, Medicaid funds should be a source of funding for Health Start Programs. At headquarters, we are discussing ways that Health Start and Medicaid can complement each other. We will keep you informed of progress in this area.

As stated in the instructions, you also should involve the regional Medical and Public Health Service Dental consultants in development of your plans and implementation of the program. Their involvement is essential to the success of Health Start.

We are all vitally concerned about the health of economically disadvantaged children and your cooperation is essential if we are to provide continuing care for them. My staff and I stand ready to assist you in any way we can. Let's all work together to make summer Health Start a program of maximum benefit for those we serve.

Enclosure

HEALTH START
INSTRUCTIONS TO REGIONS

I. OBJECTIVE. In summer 1971, we will introduce, on a limited national basis, a Health Start program. Funds will be made available to conduct experimental programs to meet the following objectives:

1. to increase the number of children receiving health services similar to those provided in regular Head Start programs.

2. to develop methods of insuring delivery of health services in areas of limited health resources.

3. to work with other local, state and national agencies to gain their assistance in providing health services for poor children.

II. MINIMUM SERVICES. Emphasis in these programs must be on serving a maximum number of children effectively. Services to be rendered must be comprehensive and include, as a minimum, the following:

1. screening

2. physical exams

3. immunizations

4. lab tests, to include routine blood work; urinalysis; testing for intestinal parasites, sickle cell anemia and lead poisoning

5. dental exam, prophylaxis and fluoride treatment

6. vision and hearing testing

7. diagnostic and treatment services for those children needing them

8. health education for parents and children as well as staff

9. make linkages, including forwarding of records, with wherever the child is going after program

III. CHILDREN TO BE SERVED. Children to be served are siblings under age 6 of youngsters currently enrolled in Head Start programs; children on Head Start waiting lists, or other low income community children under age 6 needing these health services. Coordination with such programs as the Community Coordinated Child Care (4C) program; Title IV-A of the Social Security Act; Title I of the Elementary and Secondary Education Act, and Parent and Child Centers should be encouraged as a means of identifying additional children the Health Start program will serve.

IV. GENERAL PLAN. Each region will be allocated up to $75,000 to develop a minimum of 2 programs to meet the aforementioned objectives. In addition regions are encouraged to work with individual summer grantees to restructure their currently planned summer Head Start program to a Health Start model. It should be emphasized that the additionally available Headquarters funds should serve as seed money to supplement and build upon other comparable health efforts in the community. It is expected that the bulk of the funds would be used for providing

direct health services to children. Funds may be provided for transportation. There should be a minimum expenditure for administrative staff.

Regional Medical Consultants and Public Health Service Dental Consultants to OCD are to be involved in development of these programs. Also, it is highly desirable that other regional HEW health personnel be involved in the development of the regional program.

Applicants should be given some latitude in developing Health Start models. For purposes of providing a departure point, the following possible models are described:

1. Model A. This would be a 4 to 8 week completely health oriented program that would be newly funded or a converted traditional summer program. In this model, children could devote 2 or 3 days a week to receiving health services; teachers would conduct health education programs one day a week for children and one day a week for parents. This model might be used in combination with a day camp, church group activity or other existing child care program.

2. Model B. This would be a regular 8 week summer Head Start program with additional children added on for health services only.

3. Model C. Modify a regular summer Head Start program. Cut it in half and serve a different group of children in each 4 week session.

4. Regions may choose to develop other models than those described above. However, no 2 programs in a region should be based on the same model.

An important part of the summer Health Start program would be to ensure that all necessary treatment and other health services to children are completed as required. These services are not to stop at the end of the summer program. They are to be continued until the children's health requirements are satisfied. To ensure this, each program must obtain the services of a health coordinator for a full year. This individual should be a professional nurse with administrative, teaching and counseling ability. Should such a person be unavailable in the community, a licensed practical nurse or other qualified person might be substituted. In small programs not too distant from each other, one individual might serve two programs.

V. APPLICATION REQUIREMENTS. Instructions to communities soliciting proposals should require applicants to:

1. identify how they will execute the summer phase and indicate their capacity and plans for follow up.

2. indicate the role of the policy council

in development and follow up of programs.

3. involve medical and dental consultants, furnished through the region, in developing their programs.

4. indicate how local health providers have been involved in the planning process. Such involvement of local health people is a must in the planning.

5. state how they intend to identify and serve a maximum number of children effectively.

6. indicate how they could maintain flexibility so that if they found they could take on more children part way in the program, they could do so.

7. indicate how they would tie into existing resources to maximize value received for expenditure.

8. submit, along with a narrative of the proposal, CAP forms 1, 25, 25a, 46 and 77.

VI. FUNDING PROCESS. It is expected that most if not all grantees will be organizations already funded by the region. In most instances, therefore, any extra funds will be in the form of a supplement to a grant already made.

VII. REVIEW PROCESS. Since we wish to assure that an optimum number of service delivery models will be tested during this first experimental year, a joint Headquarters-Regional team will review all proposals and decide which should be funded. Applicant communities should be told that they will be in competition with others for any additional funds. All applicants will not necessarily be funded. The soundness and ingenuity of their plans and the precision of their application will be the principal criteria we will use in evaluating their proposals.

VIII. EVALUATION. The purpose of this experimental effort during the first year will be to identify a number of methods for delivering health care to children. It is imperative, therefore, that an appropriate evaluation design and reporting mechanism be developed. We have begun that process and will consult with you on it before installing it. The local health coordinator will be expected to assist in assuring evaluation validity by submitting regular statistical reports to the regional headquarters. Copies of these reports will be fowarded to central office.

IX. TIMETABLE. Timetable for implementation is as follows:

1. regions send regional plan for the programs to Headquarters NLT March 5.

2. communities submit their proposals and applications to region NLT May 1.

3. regional-headquarters team completes application review process NLT May 15.

4. regions send out grants NLT June 1.

For further information contact Dr. Gertrude T. Hunter at (202) 755-7768.

APPENDIX B

Fact Sheet, Health Start, OCD,
March 1971

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20201

OFFICE OF CHILD DEVELOPMENT

FACT SHEET

HEALTH START

PURPOSE OF PROGRAM

Because of widespread concern about the health of economically disadvantaged children, the Office of Child Development is introducing during summer 1971, on a limited national basis, a new program called Health Start. This program is designed to provide effective health services to disadvantaged preschool children not presently served by Head Start. Funds are being made available by the Office of Child Development to conduct a variety of demonstration Health Start programs. Each of the ten HEW Regional Offices is being allocated funds to develop at least two such programs.

CHIEF OBJECTIVES

The Health Start program has three major objectives: (1) to increase the number of children receiving health services similar to those provided in Head Start programs; (2) to develop ways of ensuring delivery of health services in areas with limited health resources; and (3) to work with local, state and national agencies in identifying children of low-income families who need health services and in providing the children with these services. Health Start will serve only children up to age 6, including siblings of youngsters currently enrolled in Head Start programs, children on Head Start waiting lists, and other children of low-income families who are in this age group and need health services.

SERVICES PLANNED FOR THE CHILDREN

Health Start plans to offer a comprehensive program of health services for children, including: screening; physical examinations; immunizations; routine blood tests and urinalysis; special tests where needed for such problems as intestinal parasites, sickle cell anemia and lead poisoning; dental exam, prophylaxis and fluoride treatment; vision and hearing testing; diagnostic and treatment services for children needing them; health education for children, parents and staff; maintaining records of each child and forwarding these records as the child enters school or moves to other programs.

Health Start - page 2

FOLLOW-UP TREATMENT

As an important part of the summer Health Start program, there will be follow-up to make sure that all necessary treatment and other health services for the children are completed. These services will continue after the summer program until all the health requirements of the children are met. Every Health Start program will have a health coordinator who will follow up the needs of each child for a full year to ensure completion of the services the child needs. These coordinators will receive comprehensive training in methods of providing health services, means of ensuring completion of these services, and ways of coordinating and supplementing local resources.

SUPPLEMENTARY HEALTH EDUCATION CURRICULUM

A new and innovative health education curriculum will add to the effectiveness of the Health Start program. This new curriculum, originally developed for Head Start, will be used in all Health Start programs to teach the preschool children and their parents about the environment, the structure of the body, disease prevention and care, nutrition and other subjects that relate to the total development of the child. Child psychologists, health professionals, teachers, parents and community workers contributed to the curriculum and the special study material for children and parents. Health Start personnel will be trained to use this creative curriculum as a basic health education program that will add to the knowledge of the children and their parents and increase the value of the Health Start program for them.

REVIEWING OF COMMUNITY PROPOSALS

A joint OCD Headquarters-Regional team will review all community proposals and select the proposals to be funded. The principal criteria to be used in evaluating each proposal will be the soundness of the plan, its careful organization and flexibility, and its creative and innovative qualities. In selecting proposals for funding, an effort will be made to test a variety of models for delivering health care to children.

FOR MORE INFORMATION

Interested communities with inquiries about applications and proposals should contact the Assistant Regional Director for the Office of Child Development at the nearest Regional Office of the Department of Health, Education, and Welfare. The national coordinator for Health Start is Dr. Gertrude T. Hunter, Director of Health Services, Project Head Start, Office of Child Development, Washington, D. C.

March 1971

APPENDIX C

Medicaid Support for Health Start

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Washington, D.C. 20201

Office of Child Development

Medical Services Administration
Social & Rehabilitation Service

April 5, 1971

JOINT STATEMENT ON COORDINATION BETWEEN
TITLE XIX AND THE OFFICE OF CHILD DEVELOPMENT'S
HEAD START PROGRAM

The Medical Services Administration and the Office of Child Development are working together to explore ways in which their resources can be joined together to provide comprehensive health services to children. An initial cooperative effort is directed toward the new 1971 Health Start Program now being launched by the Office of Child Development to provide health services to children not presently being served by Head Start, such as siblings under age 6 of youngsters currently enrolled in Head Start programs, children on Head Start waiting lists, and other low-income community children under age 6 needing these services.

Health Start plans to offer a comprehensive program of health services, including screening; physical examinations; immunization; routine blood tests and urinalysis; special tests where needed for such problems as intestinal parasites, sickle cell anemia and lead poisoning; dental examinations, prophylaxis and fluoride treatment; vision and hearing testing; diagnostic and treatment services for children needing them; health education for parents, children, and staff; and maintaining records of each child and forwarding these records as the child enters school and moves to other programs.

An important part of the summer Health Start program will be follow-up to make sure that all necessary treatment and other health services for the children are completed. Each project will have a health coordinator who will follow the needs of each child for a full year to ensure completion of the services the child needs. These coordinators will receive comprehensive training in methods of providing health services, means for ensuring completion of these services, and ways of coordinating and supplementing local resources.

The Office of Child Development, in collaboration with Medical Services Administration and Health Services and Mental Health Administration, will be conducting an in-depth evaluation of strategies for the program planning, models for health delivery, and problems related to program implementation.

In addition to increasing the number of economically disadvantaged children receiving needed health care, Health Start plans to develop methods of insuring delivery of health services in areas of limited health resources, and to work with other local, State, and national agencies to gain their assistance in providing health services for children.

Each of the ten HEW regional offices of OCD is being allocated $75,000 to develop at least two demonstration programs. These funds are intended to be used as seed money to supplement and build upon other comparable health efforts in the community, and to provide health care services and necessary transportation for children when other resources are not available.

A joint OCD Headquarters-Regional team will review all community proposals to be funded. Grants will be made by June 1, and Health Start programs initiated July 1.

Role of Medicaid.

In addition to providing for medical care to Medicaid eligible children under existing State Title XIX programs, Medicaid staff should assist State Agencies and OCD offices to develop cooperative working relationships. Wherever possible, agreements should be reached with community Health Start projects for reimbursement on a pre-negotiated and fixed periodic payment basis for a specified number of Medicaid eligible children. Based on past experience, Head Start estimates a $60 to $70 annual expenditure per child for health care.

Consideration might be given to developing cooperative demonstration projects relating to screening, diagnosis, and treatment of children and young adults, and to test the value of providing health-related services by community health aides and other staff (serving as liaison between the Health Start program and medical care facilities) in assisting families with Health Start children to obtain and effectively utilize needed health care.

The Section 1115 demonstration program might be used as the vehicle for such a project. Assistance in the development of a demonstration project will be provided on request through the regional office to the Office of Innovations, MSA. Such a project can be of value not only to Health Start children, but will also demonstrate the effectiveness of interagency cooperation--a high HEW priority.

The Assistant Regional Director for OCD (see list attached) will be seeking help from State Title XIX agencies for specific community Head Start programs. I urge full cooperation of regional, State and local staff involved in the administration of Medicaid in the effective implementation of the OCD Health Start program.

Howard N. Newman
Commissioner
Medical Services Administration/SRS

Edward Zigler
Director
Office of Child Development

Enclosure

C-4

Medicaid Letter and Questionnaire

THE URBAN INSTITUTE 2100 M STREET, N.W. WASHINGTON, D.C. 20037 (202) 223-1950

October 15, 1971

Dear Health Start Health Coordinator:

I want to personally thank each of you for your cooperation, patience, and courtesy during our field visits and for promptly submitting your September 15th reports. We are now analyzing this material and hope to develop some early evaluation comments that may smooth out some of the problems encountered this year.

When Health Start was being planned, a joint statement was prepared at the Federal level on coordination between the Title XIX Medicaid Program and Health Start. I have included an extract from this statement that covers the potential assistance a local Health Start project might receive from Medicaid.

We would like to make a quick assessment of the extent to which Medicaid has actually been of assistance to you in your own project in covering medical expenses or in any other way. This may lead to a closer working relationship in future years.

If you will take a few minutes on the enclosed questionnaire and return it to us in the prepared envelope, it may open possibilities for closer and better support for Health Start projects in future years from the Medicaid programs. To be of use for this purpose, we must have the information back within a few days. Just give us your best current information.

Sincerely yours,

J. N. Nay
Senior Research Staff

JNN:ms

Enclosures:

This is an extract from the Information Memorandum MSA-IM-71-5 from the Department of Health, Education, and Welfare Social and Rehabilitation Service dated April 5, 1971. It was addressed to State Agencies Administering Approved Medical Assistance Programs and Public Assistance Programs.

Role of Medicaid.

In addition to providing for medical care to Medicaid eligible children under existing State Title XIX programs, Medicaid staff should assist State Agencies and OCD offices to develop cooperative working relationships. Wherever possible, agreements should be reached with community Health Start projects for reimbursement on a pre-negotiated and fixed periodic payment basis for a specified number of Medicaid eligible children. Based on past experience, Head Start estimates a $60 to $70 annual expenditure per child for health care.

Consideration might be given to developing cooperative demonstration projects relating to screening, diagnosis, and treatment of children and young adults, and to test the value of providing health-related services by community health aides and other staff (serving as liaison between the Health Start program and medical care facilities) in assisting families with Health Start children to obtain and effectively utilize needed health care.

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The Assistant Regional Director for OCD will be seeking help from State Title XIX agencies for specific community Head Start programs. I urge full cooperation of regional, State and local staff involved in the administration of Medicaid in the effective implementation of the OCD Health Start program.

Howard N. Newman
Commissioner
Medical Services Administration/SRS

Edward Zigler
Director
Office of Child Development

ROLE OF MEDICAID
IN YOUR HEALTH START PROGRAM

Program _____

Health Coordinator _____

Person Completing Questionnaire
(if not the Health Coordinator) _____

1. How many of the children in your program are already covered by Medicaid.

   _____ Number _____ Don't Know

2. Do you have a written cooperative agreement with local Medicaid?

   _____ Yes _____ No If yes, would you enclose a copy.

3. Do you have an unwritten, but clearly understood, working agreement with your local Medicaid?

   _____ Yes _____ No

4. Are you confused or unclear about the operation, eligibility, or coverage of local Medicaid and how to use it in your program?

   _____ Yes _____ No

   What is most confusing?

   What is clear?

5. Have you ever heard of the Section 1115 demonstration program (see attachment)?

_____ Yes _____ No

6. Have you been contacted about any special arrangement with Medicaid?

_____ Yes _____ No

If yes, was it Section 1115 _____

Regular Local Medicaid _____

Other Medicaid _____

7. Have you applied for or tried to develop any support for Health Start children from Medicaid?

_____ Yes _____ No

If yes, was it:

_____ Funding for medical expenses of children already qualified under present local Medicaid.

_____ Qualification of additional children under local Medicaid.

_____ Local joint (Health Start/Medicaid) program.

_____ Section 1115 demonstration project.

_____ Use of Medicaid for dental services.

_____ Other

8. What happened?

9. Do you know how much support (in dollars) your enrolled children have received from Medicaid?

_____ Yes _____ No

If yes, how much? _____ in dollars

10. If no on question 9, what services have been covered under Medicaid?

11. Does Medicaid cover dental services in your area?

_____ Yes _____ No If yes, to what extent?

12. Any other comments on the usefulness of Medicaid to your project and the help received to date from this source:

APPENDIX D

Performance Data on Health Services Provided by Projects

LISTING OF FIGURES AND TABLES

FIGURE #	TABLE #	PROJECTS	PAGES
D-1	D-1	Tulsa, Okla. & Hammond, La.	D-3 & D-4
D-2	D-2	Tucson, Ariz. (Pima & Santa Cruz)	D-5 & D-6
D-3	D-3	Dallas, Tex. & Chadron, Neb.	D-7 & D-8
D-4	D-4	Pasco, Wash. & Northampton, Mass.	D-9 & D-10
D-5	D-5	Mora, Minn. & Flint, Mich.	D-11 & D-12
D-6	D-6	Portageville, Mo. & Dayton, Ohio	D-13 & D-14
D-7	D-7	Penobscot, Me. (Camp & Satellite)	D-15 & D-16
D-8	D-8	Cedar City, Utah & Boone, N.C.	D-17 & D-18
D-9	D-9	The Dalles, Ore. & Benton, Ark.	D-19 & D-20
D-10	D-10	St. Louis, Mo. & Baltimore, Md.	D-21 & D-22
D-11	D-11	Center, Colo. & Hillsboro, Ore.	D-23 & D-24
D-12	D-12	Toms River, N.J. & Albion, N.Y.	D-25 & D-26
D-13	D-13	Charleston, S.C. & San Juan, P.R.	D-27 & D-28
D-14	D-14	Fairmont, W.Va. & Medford, Ore.	D-29 & D-30
D-15	D-15	Coos Bay, Ore. & Garden City, Kan.	D-31 & D-32
D-16	D-16	Orlando, Fla.	D-33 & D-34
	D-17	Table of Children Tested Who Needed Treatment and Percent of Children Needing Treatment Who Completed Treatment	D-35

This appendix contains health services data for individual Health Start projects. The figures and tables on pages D-2 to D-33 show data on health services given and children's health status (based on enrollment). The figures and back-up tables are arranged to present projects in descending order of project size.

The figures display percent of children enrolled who were tested (for each of the seven required tests as well as optional tests), percent needing treatment (based on enrollment) and percent meeting the guideline requirements (those enrolled who received the required test and needed no treatment, those enrolled who needed and completed treatment (or are under care for chronic problems) and those who were too young to require the test. The tables which follow the figures present the back-up data for the figures with the breakdown of the bar "meeting guideline requirement."

Table D-34 shows project data on children tested: percent tested needing treatment and percent of those needing treatment who complete treatment. Finally, an explanation of the Tulsa data is presented as an attachment to the appendix.

The Tulsa project needs special note. Because the grantee was funded as a computerized multiphasic screening and <u>referral</u> program, information on follow-up treatment was not reported. As a result, the bar for completion of tests represents <u>only</u> those children who were "OK" - needing no treatment. It does not include children whose treatment is complete (even though it is possible that some of the children may have completed all necessary treatment). The attachment to this appendix describes in more detail the tabulation of the Tulsa data.

FIGURE D-1 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE TULSA AND HAMMOND PROJECTS

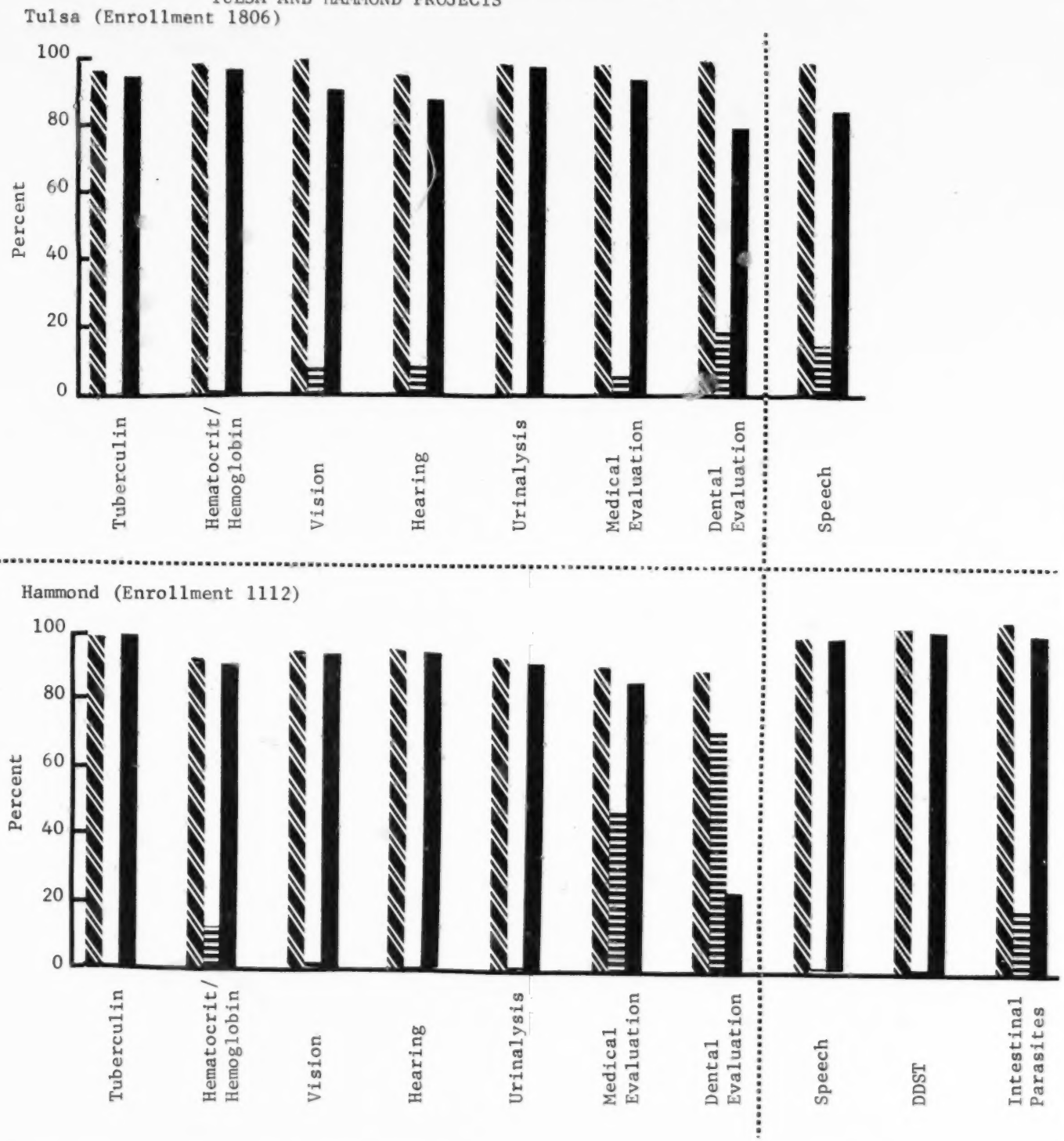


TABLE D-1 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE TULSA AND HAMMOND PROJECTS

Tulsa (1806)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	95	98	99	93	88	94	80
Tested/Needing Treatment/Not Completed (R,RB)	0	1	1	6	8	5	20
Tested/Needing Treatment/ Completed (RC/OK)	0	0	0	0	0	0	0
Too Young to be Tested	--	--	--	0	0	--	0
Not Tested	4	1	1	0	4	0	0
Meeting Program Requirement	95	98	99	93	88	94	80

Hammond (1112)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	99	79	92	90	93	43	19
Tested/Needing Treatment/Not Completed (R,RB)	0	2	0	2	1	5	67
Tested/Needing Treatment/ Completed (RC/OK)	0	11	1	1	0	42	4
Too Young to be Tested	--	--	--	0	0	--	0
Not Tested	1	8	7	7	6	10	11
Meeting Program Requirement	99	90	92	92	93	85	23

FIGURE D-2 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE TUCSON PROJECT - (PIMA AND SANTA CRUZ)

Tucson (Total Enrollment 774)

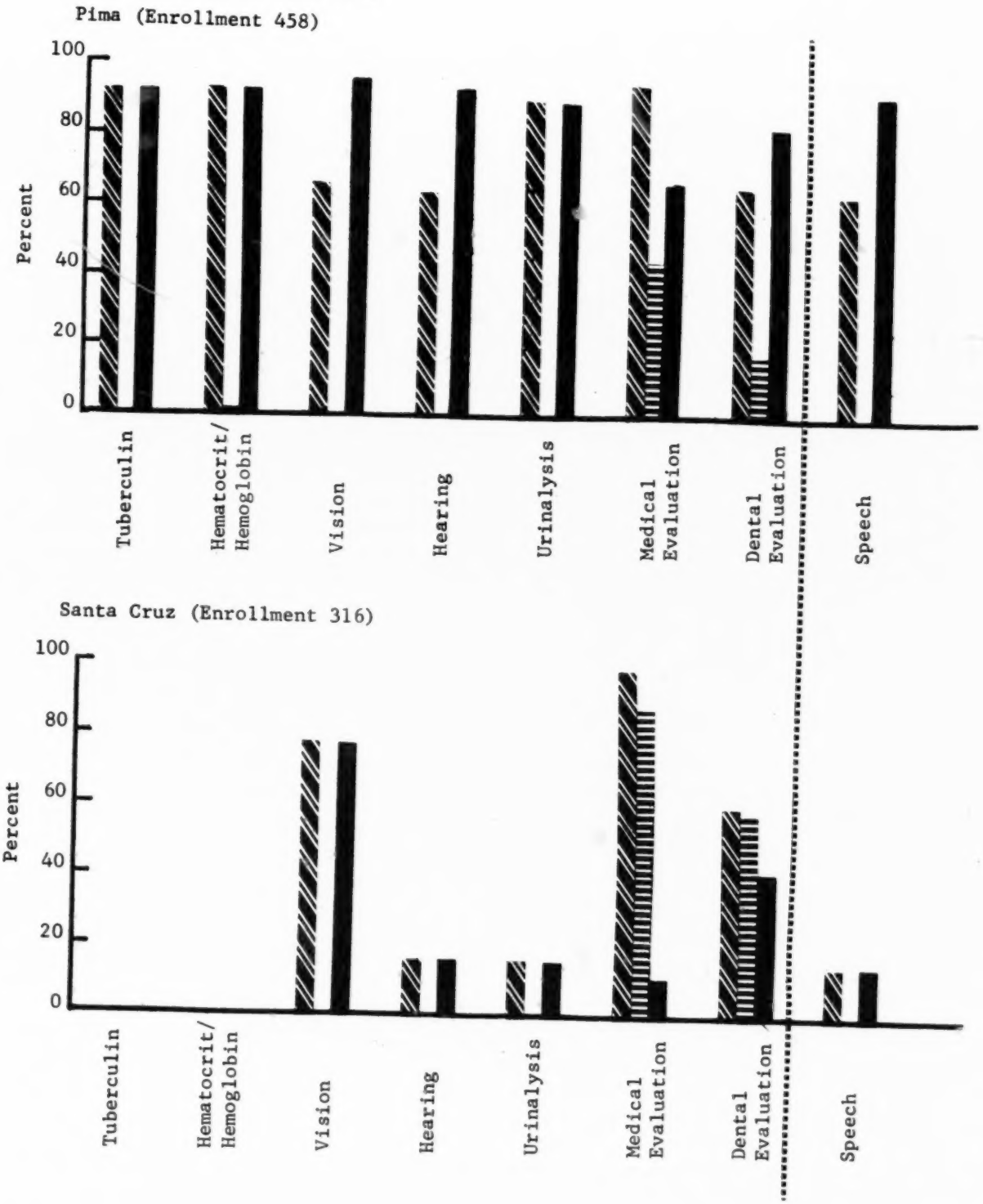


TABLE D-2 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE TUCSON PROJECT (PIMA AND SANTA CRUZ)

Tucson (Pima--458)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	92	92	90	67	64	51	49
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	0	0	29	11
Tested/Needing Treatment/ Completed (RC/OK)	0	0	0	0	0	15	7
Too Young to be Tested	--	--	--	29	29	--	29
Not Tested	8	7	10	4	7	4	4
Meeting Program Requirement	92	93	90	96	93	67	8[illegible]

Tucson (Santa Cruz--316)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	--	--	17	78	17	11	2
Tested/Needing Treatment/Not Completed (R,RB)	--	--	0	0	0	88	58
Tested/Needing Treatment/ Completed (RC/OK)	--	--	0	0	0	0	0
Too Young to be Tested	--	--	--	0	0	--	40
Not Tested	100	100	83	22	83	1	0
Meeting Program Requirement	0	0	17	78	17	11	42

FIGURE D-3 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE DALLAS AND CHADRON PROJECTS

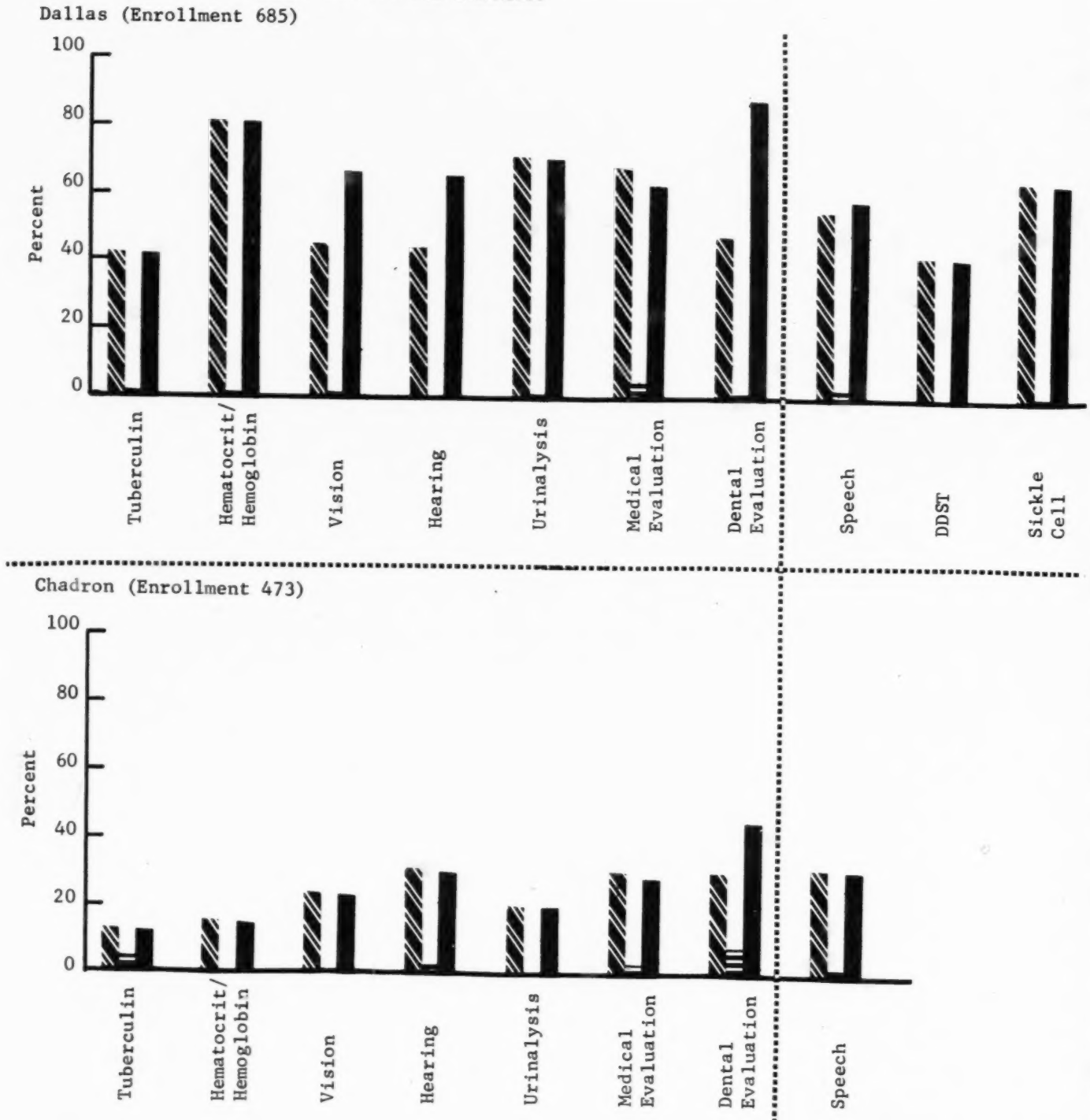


TABLE D-3 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE DALLAS AND CHADRON PROJECTS

Dallas (685)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	41	80	70	43	43	52	31
Tested/Needing Treatment/Not Completed (R,RB)	0	1	1	0	0	4	2
Tested/Needing Treatment/ Completed (RC/OK)	1	1	0	1	0	11	14
Too Young to be Tested	--	--	--	23	23	--	44
Not Tested	58	18	29	33	34	33	10
Meeting Program Requirement	42	82	71	67	66	63	89

Chadron (473)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	8	16	20	23	29	27	22
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	0	1	2	7
Tested/Needing Treatment/ Completed (RC/OK	4	0	0	0	0	2	1
Too Young to be Tested	--	--	--	0	0	--	22
Not Tested	88	84	80	76	69	69	47
Meeting Program Requirement	12	16	20	23	30	29	45

FIGURE D-4 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE PASCO AND NORTHAMPTON PROJECTS

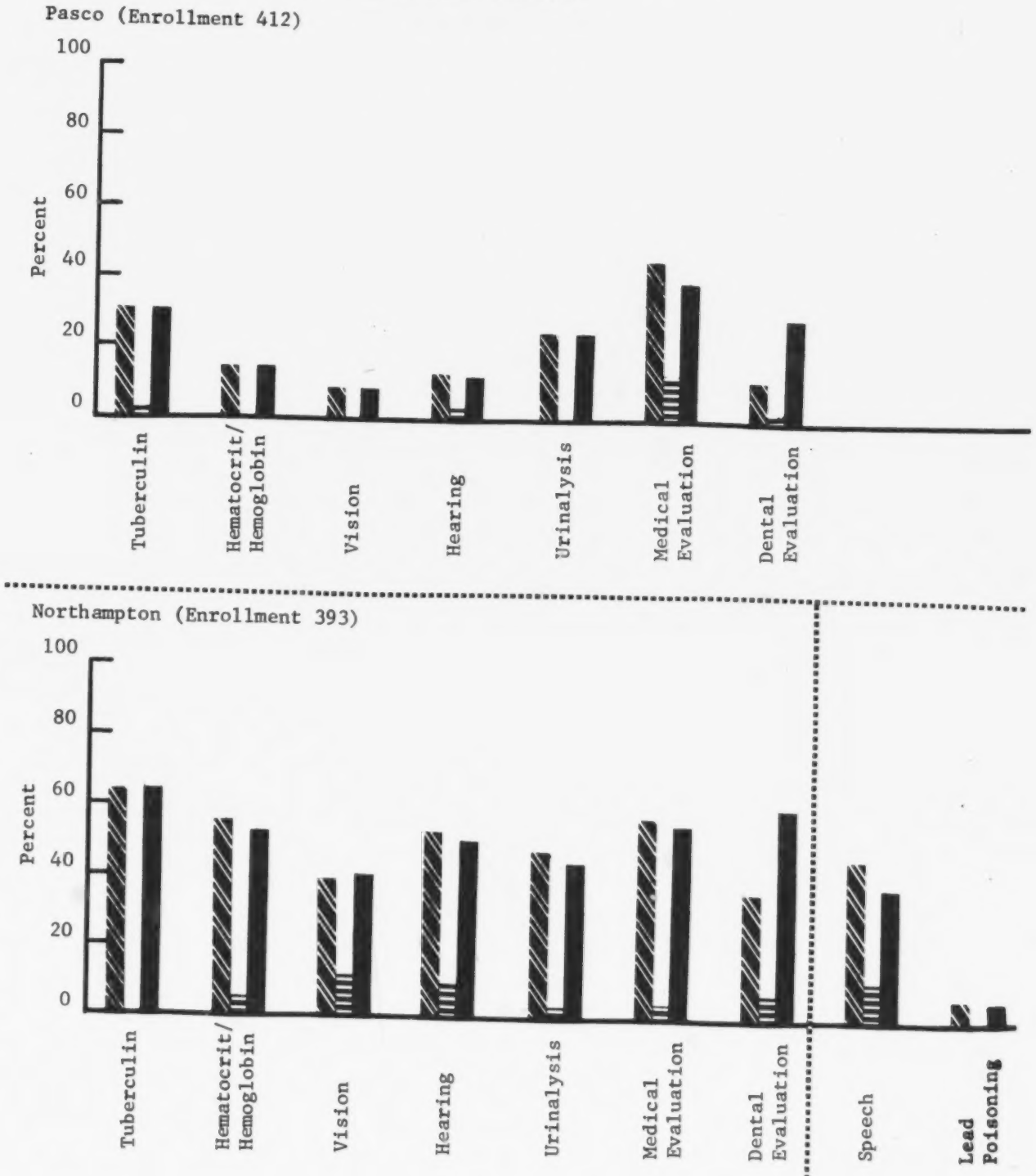


TABLE D-4 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE PASCO AND NORTHAMPTON PROJECTS

Pasco (412)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	29	14	24	8	10	33	9
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	0	1	7	1
Tested/Needing Treatment/ Completed (RC/OK)	1	0	0	0	1	5	0
Too Young to be Tested	--	--	--	0	0	--	18
Not Tested	70	86	76	91	87	55	70
Meeting Program Requirement	30	14	24	8	11	38	27

Northampton (393)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	64	50	44	29	41	52	27
Tested/Needing Treatment/Not Completed (R,RB)	0	3	2	9	7	1	3
Tested/Needing Treatment/ Completed (RC/OK	0	2	1	2	3	3	4
Too Young to be Tested	--	--	--	10	6	--	29
Not Tested	36	45	53	51	42	43	35
Meeting Program Requirement	64	52	43	40	50	55	60

FIGURE D-5 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE MORA AND FLINT PROJECTS

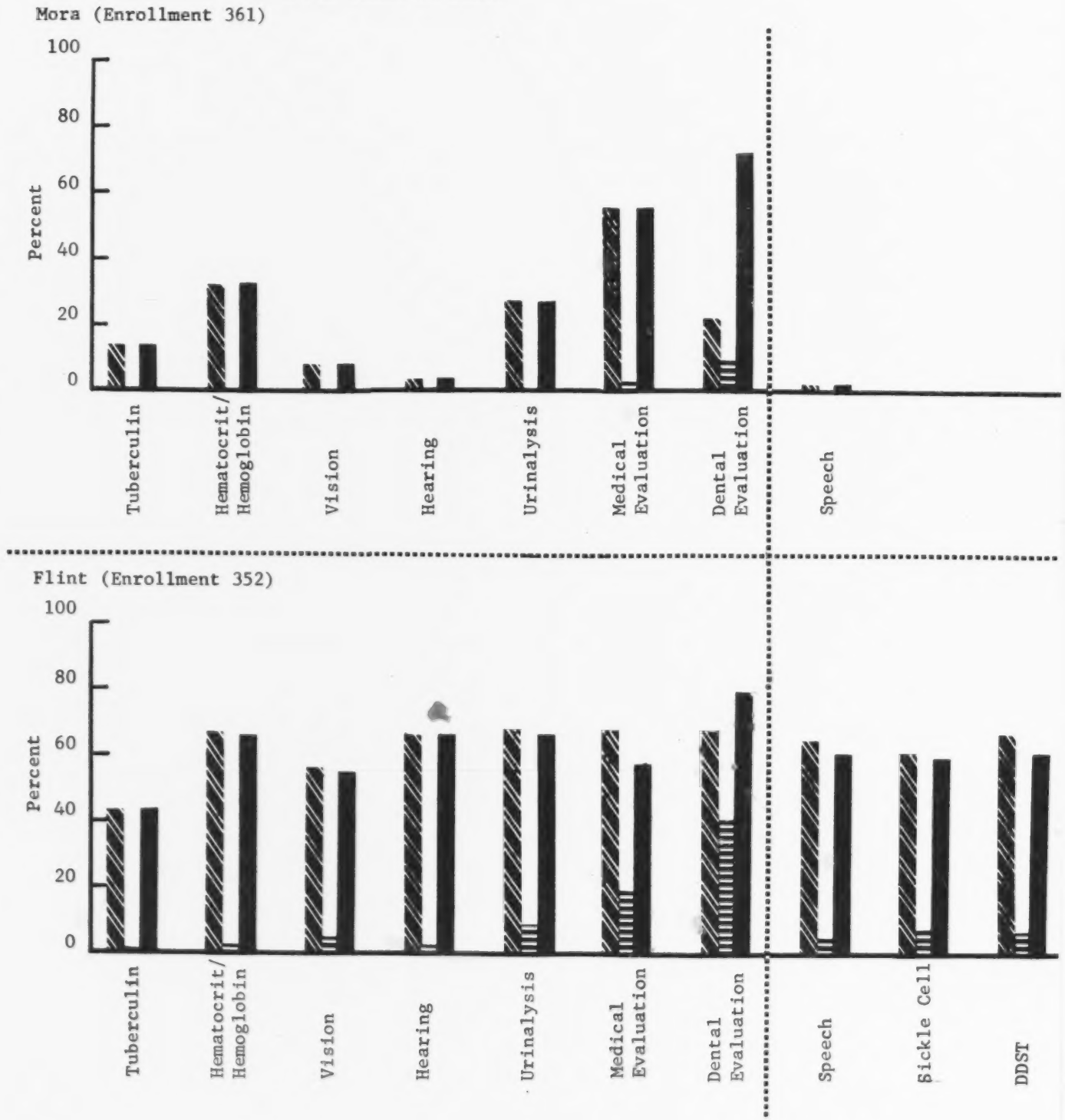


TABLE D-5 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE MORE AND FLINT PROJECTS

Mora (361)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	14	31	26	8	4	54	12
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	0	0	0	0
Tested/Needing Treatment/ Completed (RC/OK)	0	0	0	0	0	1	9
Too Young to be Tested	--	--	--	0	0	--	50
Not Tested	86	69	74	92	96	45	29
Meeting Program Requirement	14	31	26	8	4	55	71

Flint (352)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	42	66	59	52	65	48	28
Tested/Needing Treatment/Not Completed (R,RB)	0	1	1	1	0	10	5
Tested/Needing Treatment/ Completed (RC/OK	1	0	7	3	1	9	35
Too Young to be Tested	--	--	--	0	0	--	16
Not Tested	57	33	33	44	34	33	17
Meeting Program Requirement	43	66	66	55	66	57	79

FIGURE D-6 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE PORTAGEVILLE AND DAYTON PROJECTS

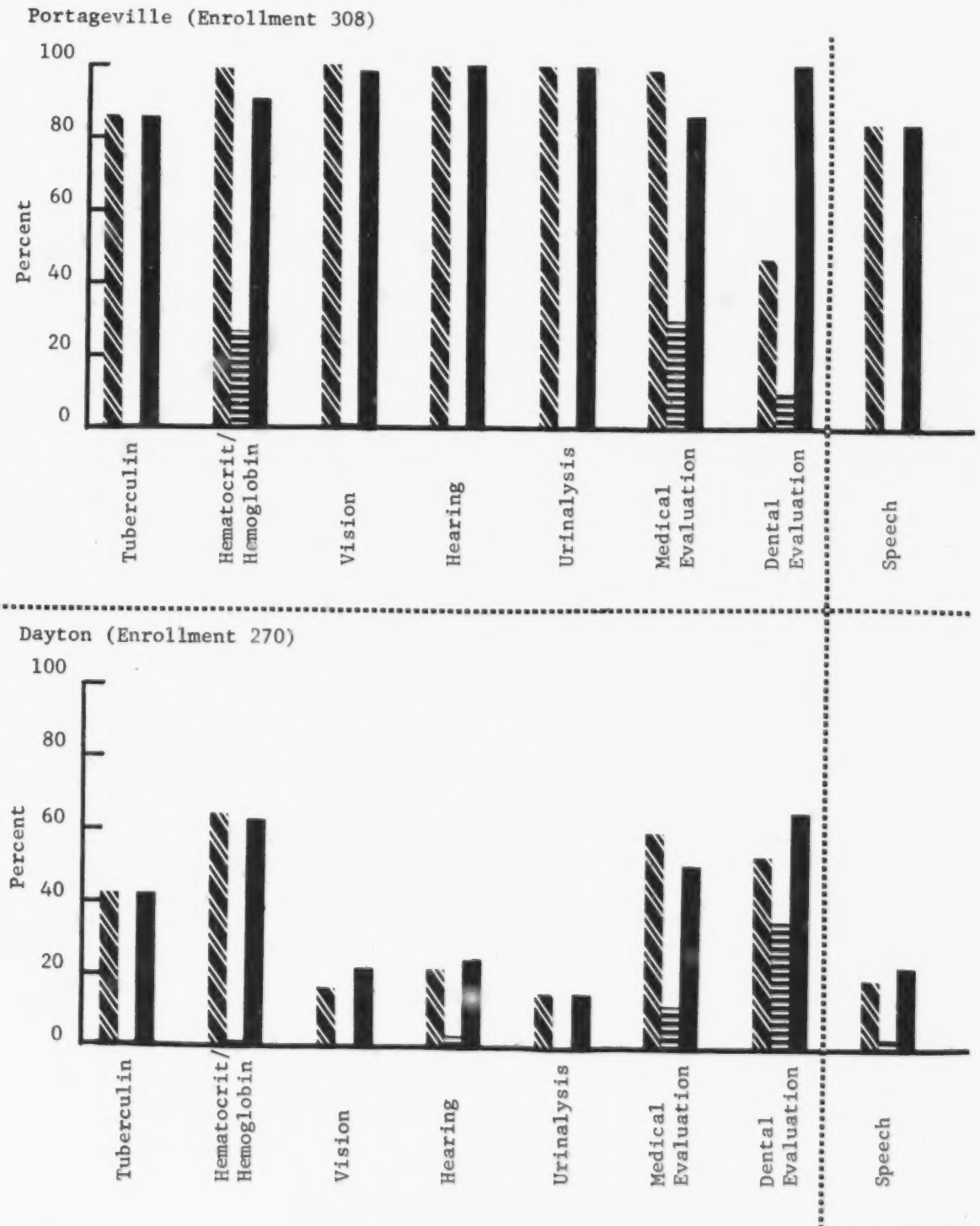


TABLE D-6 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE PORTAGEVILLE AND DAYTON PROJECTS

Portageville (308)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	86	72	100	99	100	68	37
Tested/Needing Treatment/Not Completed (R,RB)	0	8	0	1	0	12	0
Tested/Needing Treatment/ Completed (RC/OK)	0	19	0	0	0	18	10
Too Young to be Tested	--	--	--	0	0	--	53
Not Tested	14	0	0	0	0	2	0
Meeting Program Requirement	86	91	100	99	100	86	100

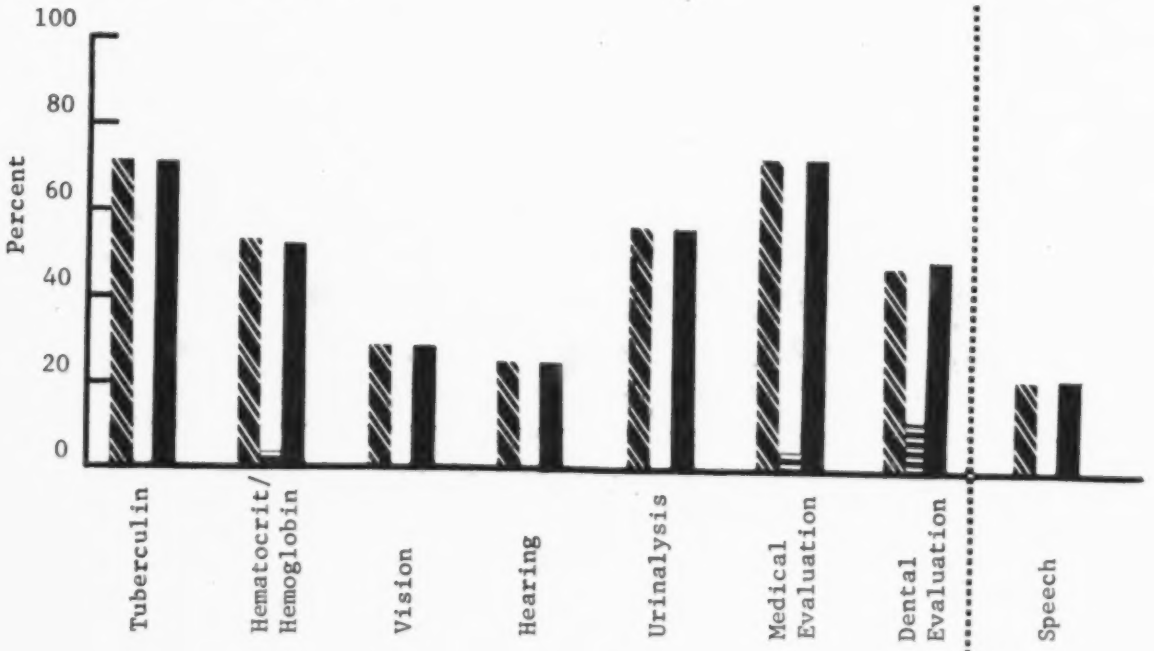
Dayton (270)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	42	63	14	16	19	48	19
Tested/Needing Treatment/Not Completed (R,RB)	0	1	0	0	2	9	23
Tested/Needing Treatment/ Completed (RC/OK	0	0	0	0	1	2	11
Too Young to be Tested	--	--	--	6	4	--	36
Not Tested	58	35	86	78	74	41	11
Meeting Program Requirement	42	63	14	22	24	50	66

FIGURE D-7 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE PENOBSCOT PROJECT

Penobscot (Total Enrollment 265)

Camp (Enrollment 97)



Satellite (Enrollment 168)

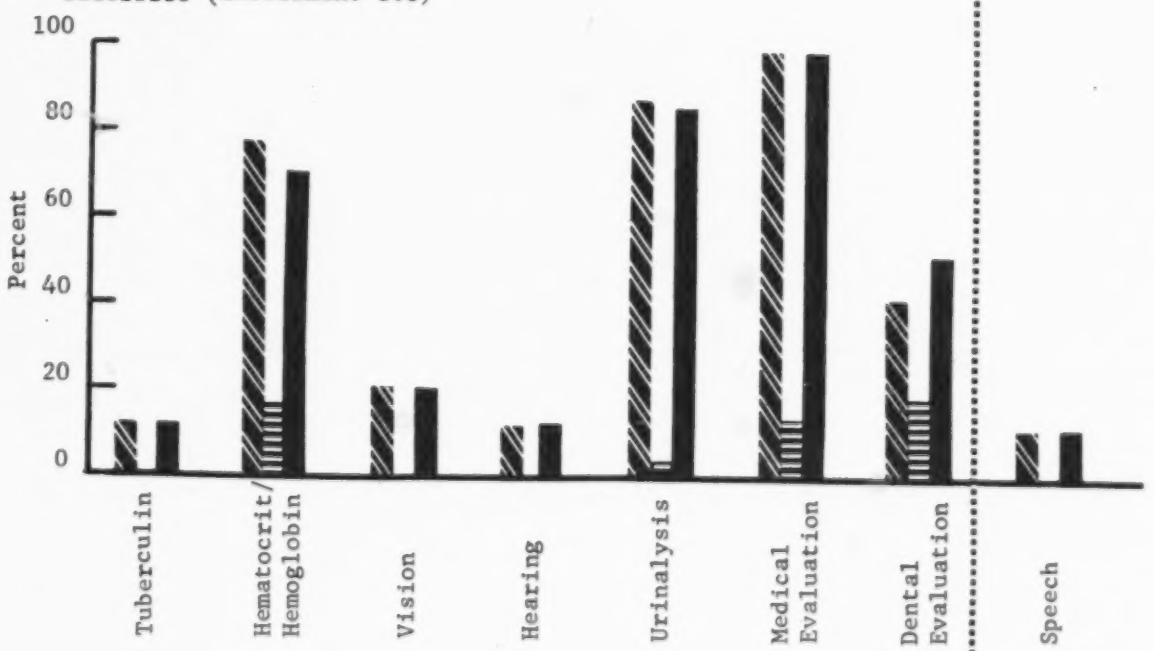


TABLE D-7 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE PENOBSCOT PROJECT

Penobscot (Camp--97)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	61	49	57	29	25	68	37
Tested/Needing Treatment/Not Completed (R,RB)	0	1	0	0	0	0	5
Tested/Needing Treatment/ Completed (RC/OK)	0	2	0	0	0	5	7
Too Young to be Tested	--	--	--	0	0	--	6
Not Tested	39	47	43	71	75	27	44
Meeting Program Requirement	61	51	57	29	25	73	50

Penobscot (Satellite--168)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	11	61	85	20	11	86	22
Tested/Needing Treatment/Not Completed (R,RB)	0	8	2	0	0	0	0
Tested/Needing Treatment/ Completed (RC/OK	0	9	0	0	0	13	19
Too Young to be Tested	--	--	--	0	0	--	10
Not Tested	89	22	12	80	89	0	49
Meeting Program Requirement	11	70	85	20	11	99	51

FIGURE D-8 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE CEDAR CITY AND BOONE PROJECTS

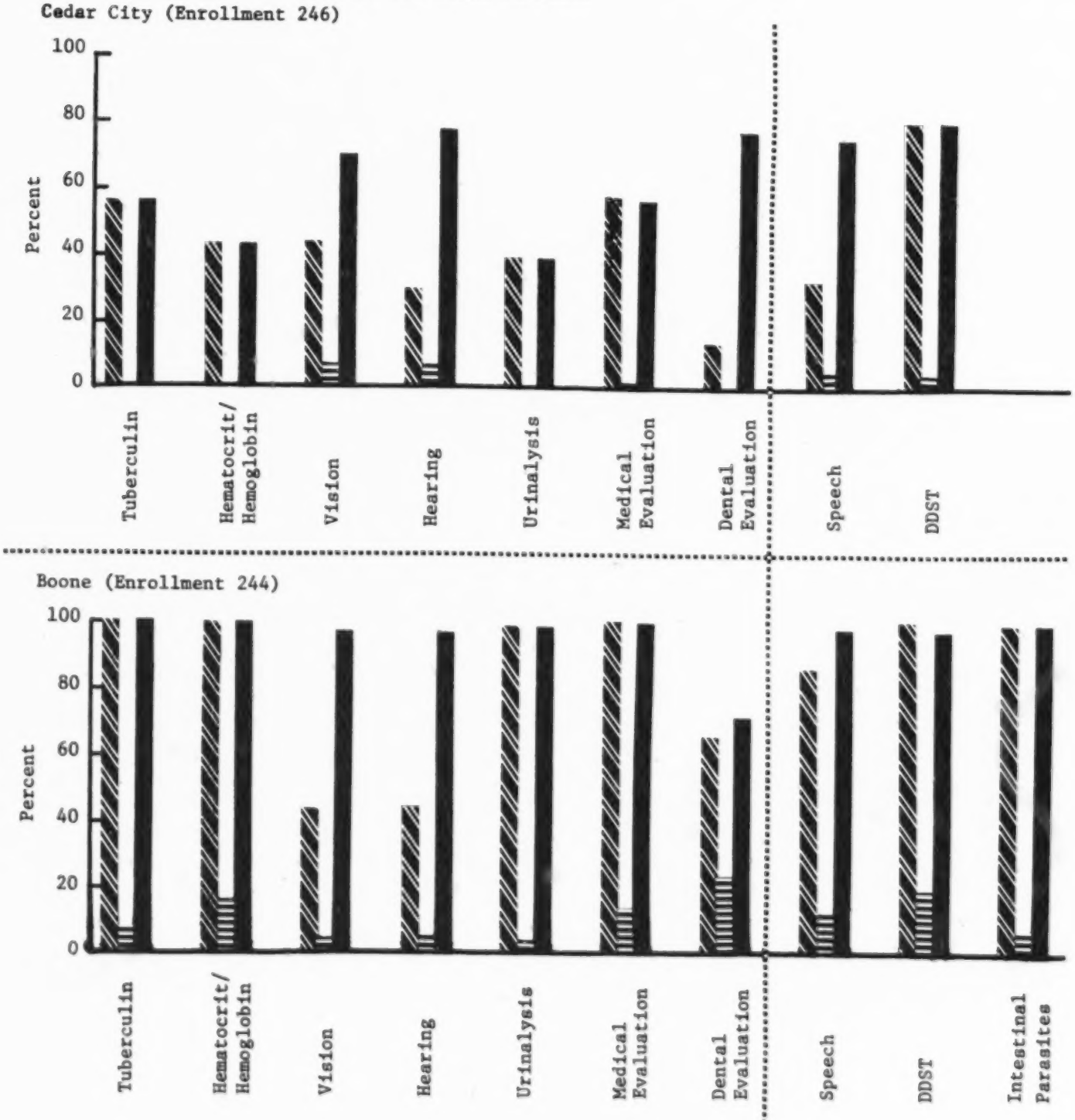


TABLE D-8 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE CEDAR CITY AND BOONE PROJECTS

Cedar City (246)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	56	43	39	35	23	56	13
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	1	4	0	0
Tested/Needing Treatment/ Completed (RC/OK)	0	0	0	6	3	0	0
Too Young to be Tested	--	--	--	29	52	--	64
Not Tested	44	57	61	29	18	43	24
Meeting Program Requirement	56	43	39	70	78	56	77

Boone (244)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	92	84	95	37	38	86	42
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	1	2	0	23
Tested/Needing Treatment/ Completed (RC/OK	8	16	4	4	4	14	0
Too Young to be Tested	--	--	--	56	56	--	28
Not Tested	0	0	1	0	0	0	6
Meeting Program Requirement	100	100	99	97	98	100	70

FIGURE D-9 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE DALLES AND BENTON PROJECTS

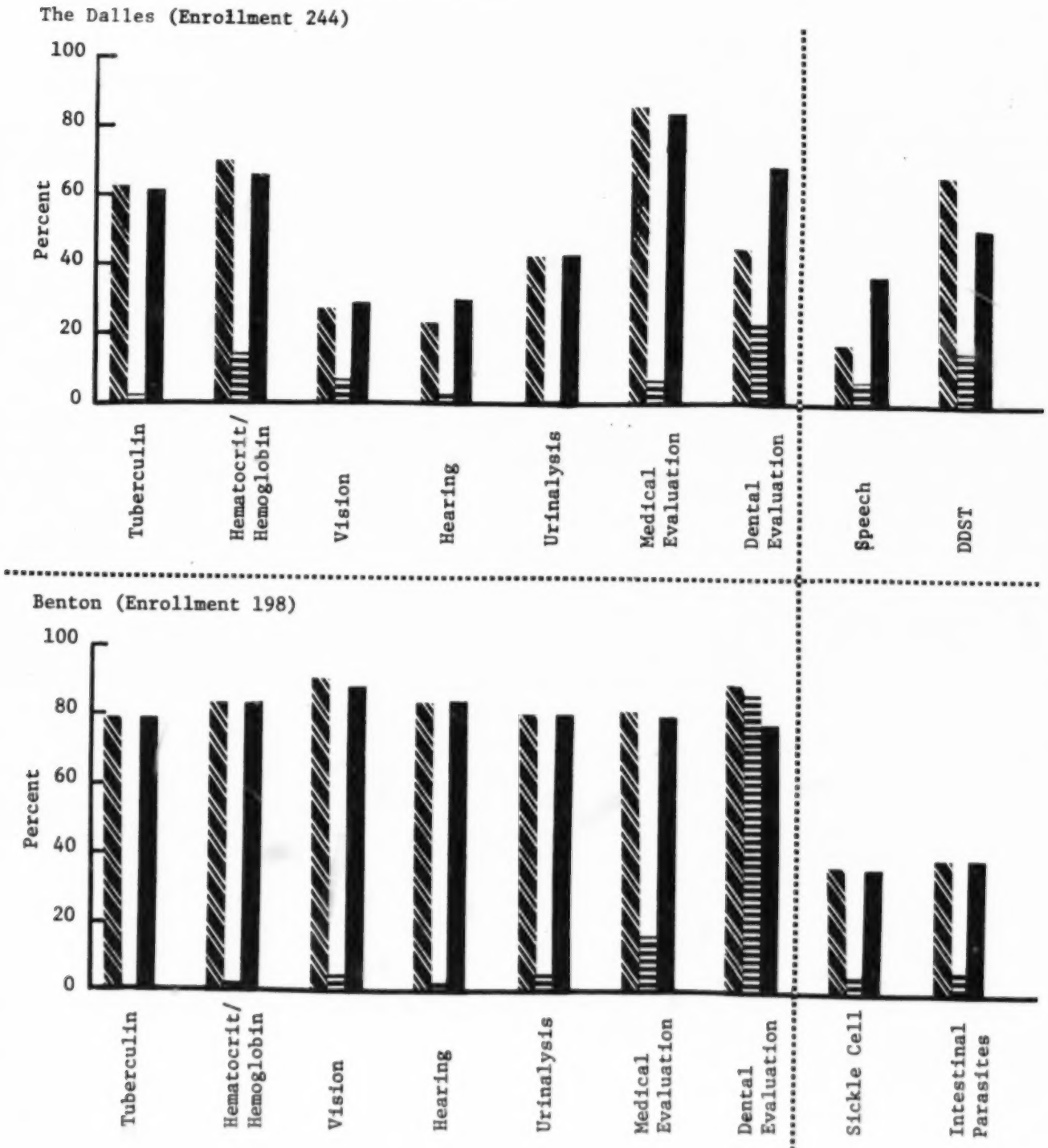


TABLE D-9 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE DALLES AND BENTON PROJECTS

The Dalles (244)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	61	56	42	20	21	80	22
Tested/Needing Treatment/Not Completed (R,RB)	1	4	0	6	1	2	15
Tested/Needing Treatment/ Completed (RC/OK)	0	10	1	1	1	4	8
Too Young to be Tested	--	--	--	8	8	--	39
Not Tested	38	30	58	65	69	14	16
Meeting Program Requirement	61	66	43	29	30	84	69

Benton (198)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	79	81	75	86	80	65	2
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	2	0	1	11
Tested/Needing Treatment/ Completed (RC/OK	0	2	5	2	3	15	76
Too Young to be Tested	--	--	--	0	0	--	0
Not Tested	21	17	20	10	17	19	11
Meeting Program Requirement	79	83	80	88	83	80	78

FIGURE D-10 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE ST. LOUIS AND BALTIMORE PROJECTS

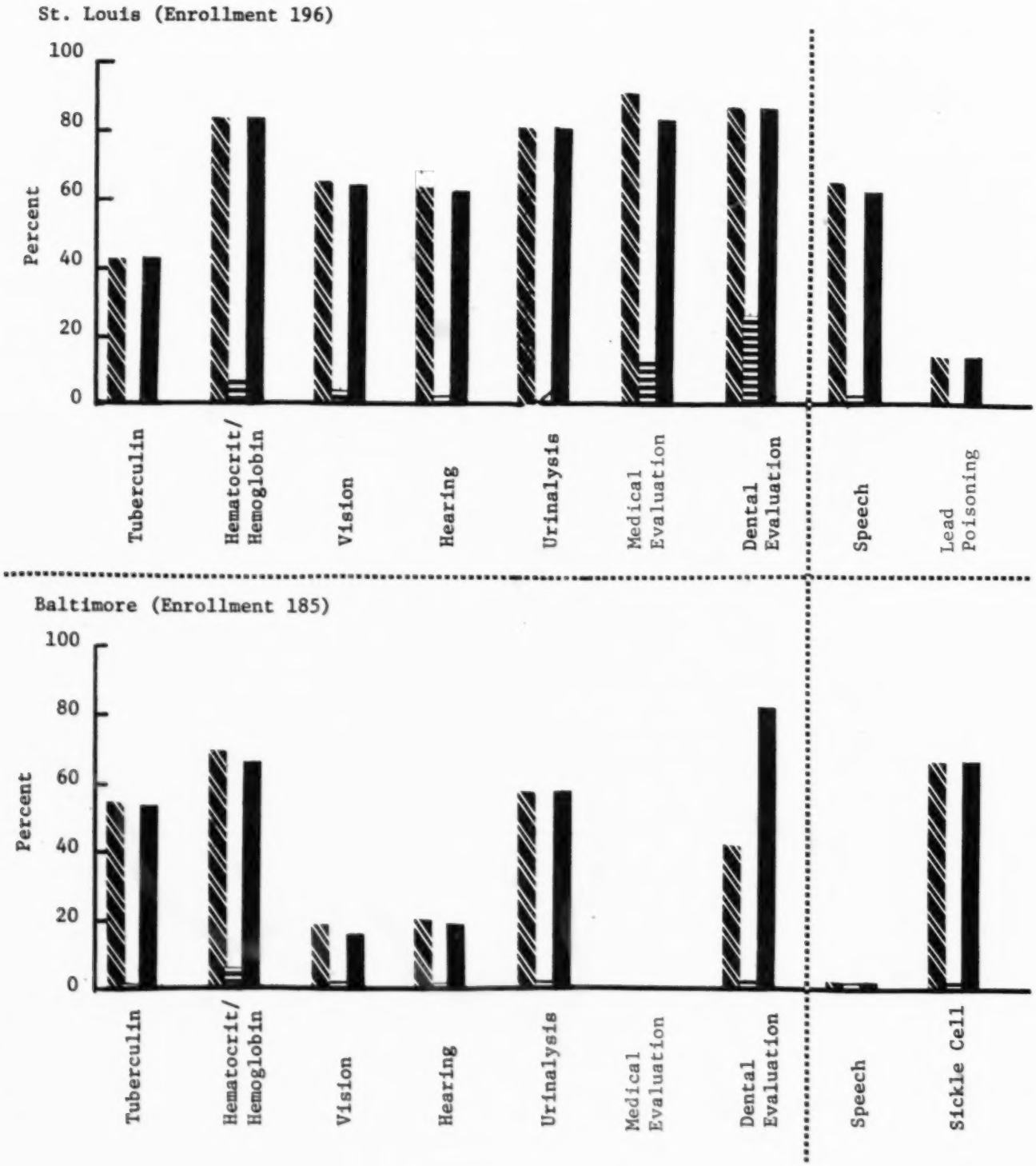


TABLE D-10 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE ST. LOUIS AND BALTIMORE PROJECTS

St. Louis (196)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	42	76	80	61	61	78	60
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	2	1	9	5
Tested/Needing Treatment/ Completed (RC/OK)	0	7	0	1	1	4	21
Too Young to be Tested	--	--	--	0	0	--	5
Not Tested	58	17	20	36	37	10	9
Meeting Program Requirement	42	83	80	62	62	82	86

Baltimore (185)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	53	63	56	16	19	--	39
Tested/Needing Treatment/Not Completed (R,RB)	1	2	0	2	1	--	0
Tested/Needing Treatment/ Completed (RC/OK	0	4	2	0	0	--	0
Too Young to be Tested	--	--	--	0	0	--	42
Not Tested	46	31	42	81	80	--	17
Meeting Program Requirement	53	67	58	16	19	0	81

FIGURE D-11 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE CENTER AND HILLSBORO PROJECTS

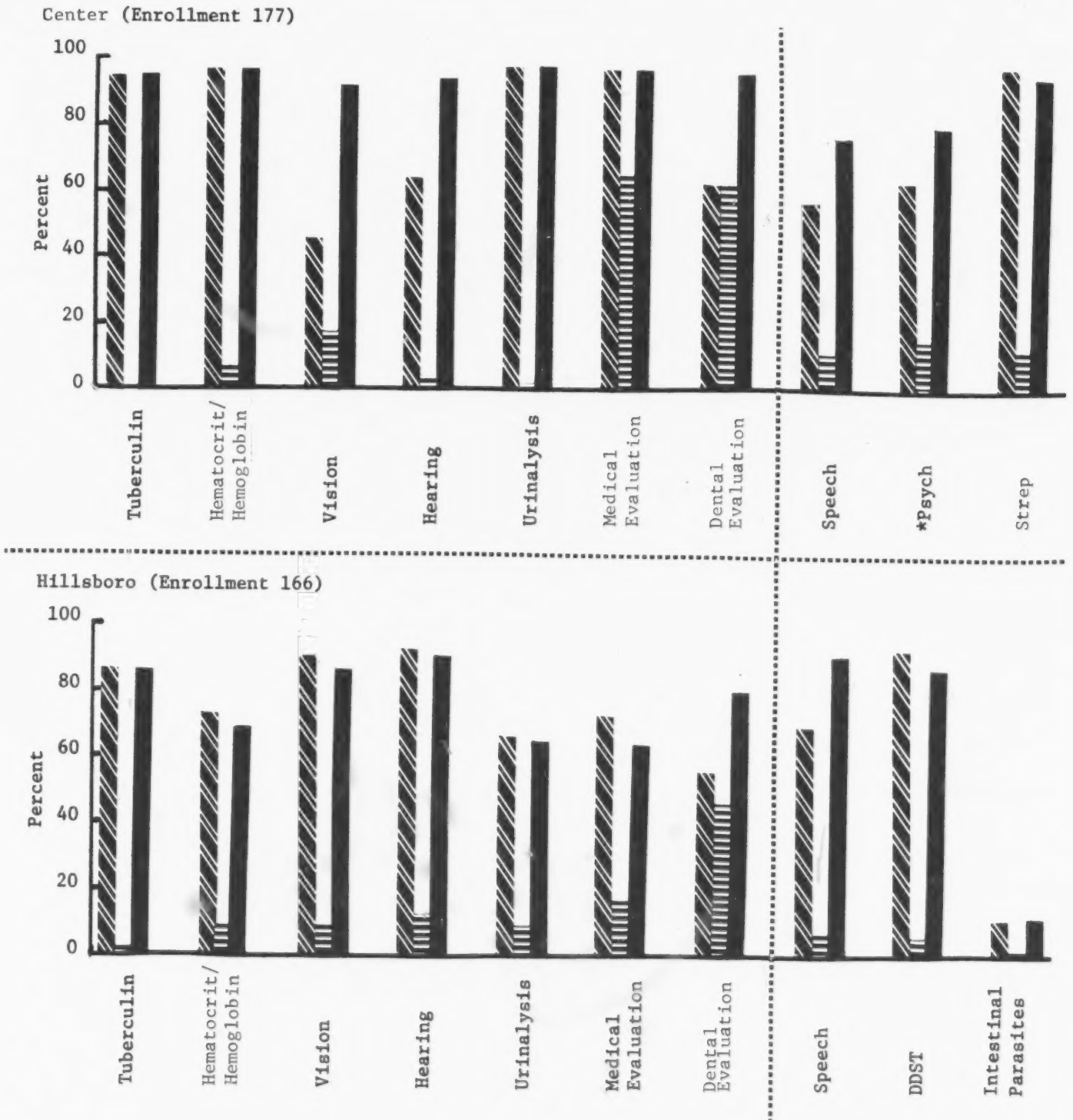


TABLE D-11 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE CENTER AND HILLSBORO PROJECTS

Center (177)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	94	89	95	27	59	34	0
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	4	2	0	2
Tested/Needing Treatment/ Completed (RC/OK)	0	7	2	14	2	63	59
Too Young to be Tested	--	--	--	50	32	--	37
Not Tested	6	4	4	6	6	4	2
Meeting Program Requirement	94	96	97	91	93	97	96

Hillsboro (166)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	83	63	56	81	80	54	10
Tested/Needing Treatment/Not Completed (R,RB)	0	4	1	2	2	8	11
Tested/Needing Treatment/ Completed (RC/OK	2	5	8	7	10	9	35
Too Young to be Tested	--	--	--	0	0	--	34
Not Tested	14	28	34	10	8	28	10
Meeting Program Requirement	85	68	64	88	90	63	79

FIGURE D-12 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE TOMS RIVER AND ALBION PROJECTS

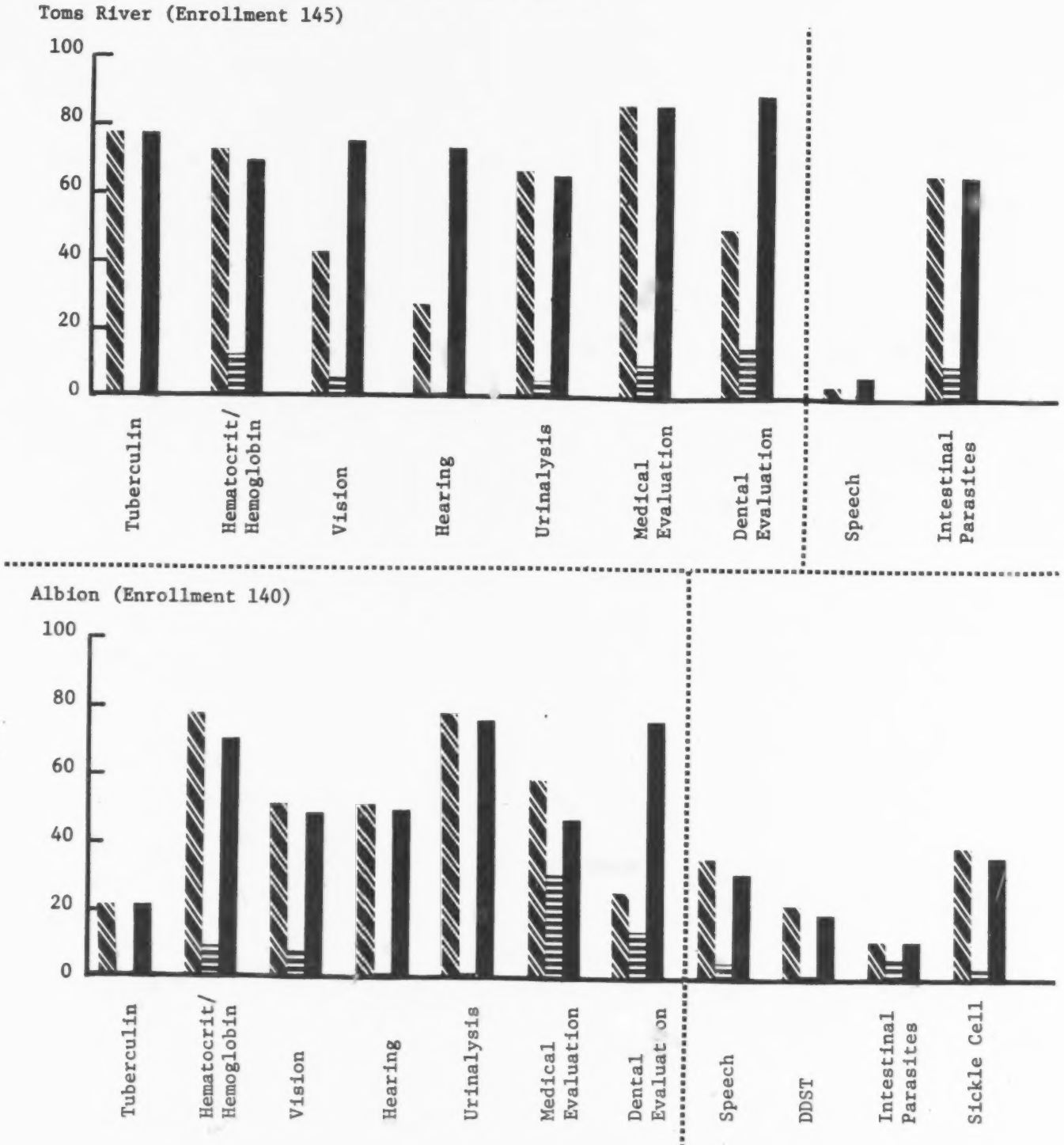


TABLE D-12 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE TOMS RIVER AND ALBION PROJECTS

Toms River (145)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	78	61	62	46	27	76	34
Tested/Needing Treatment/Not Completed (R,RB)	0	4	0	2	0	0	4
Tested/Needing Treatment/ Completed (RC/OK)	0	8	4	4	1	9	11
Too Young to be Tested	--	--	--	26	46	--	44
Not Tested	22	26	33	21	26	14	6
Meeting Program Requirement	78	69	66	76	74	85	89

Albion (140)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	21	69	76	44	49	29	13
Tested/Needing Treatment/Not Completed (R,RB)	0	7	1	3	0	13	4
Tested/Needing Treatment/ Completed (RC/OK	0	0	0	4	0	17	9
Too Young to be Tested	--	--	--	0	0	--	53
Not Tested	79	22	22	49	49	41	22
Meeting Program Requirement	21	69	76	48	49	46	75

FIGURE D-13 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE CHARLESTON AND SAN JUAN PROJECTS

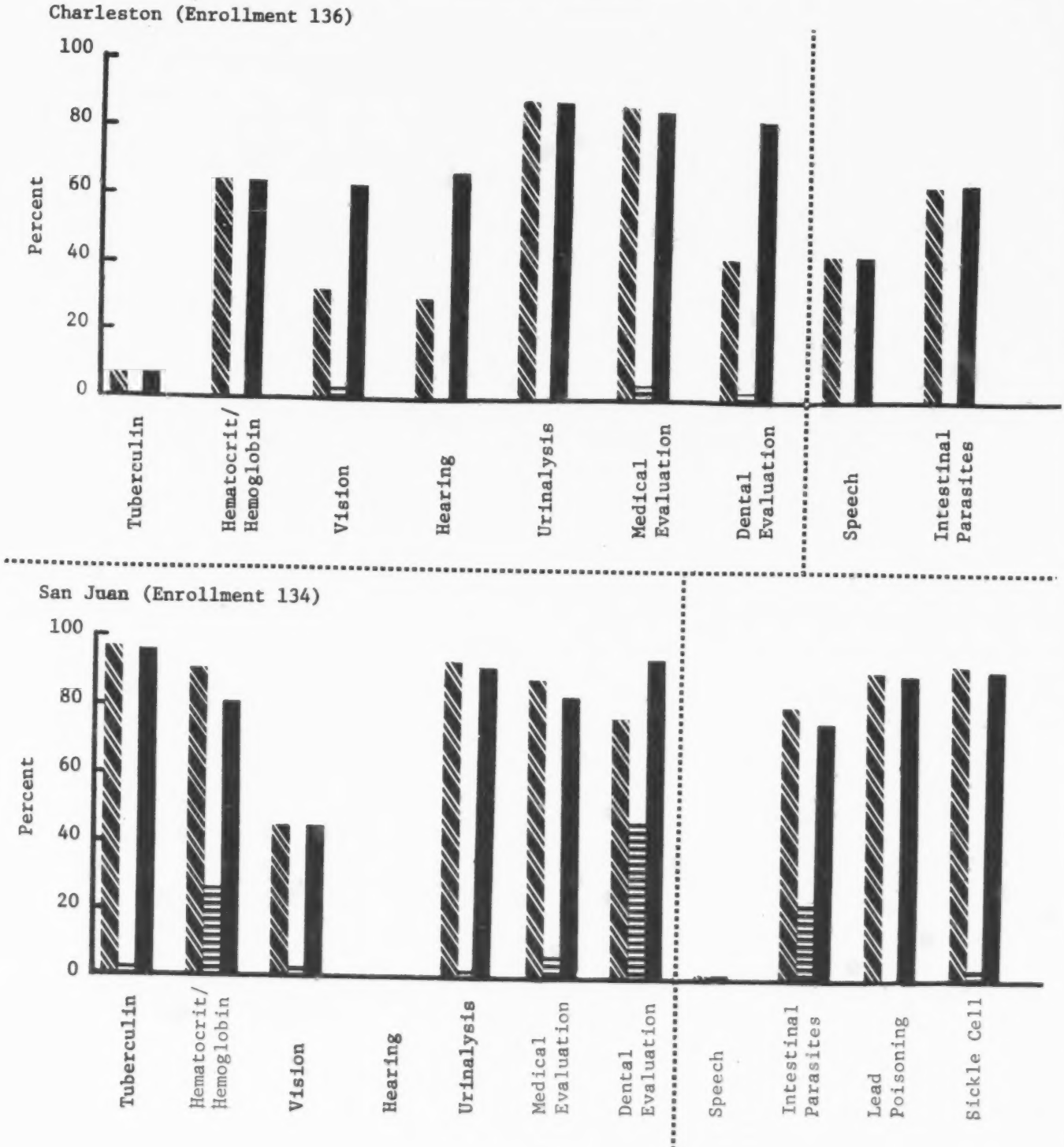


TABLE D-13 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE CHARLESTON AND SAN JUAN PROJECTS

Charleston (136)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	7	63	88	29	29	82	40
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	0	0	1	1
Tested/Needing Treatment/ Completed (RC/OK)	0	0	0	0	0	3	0
Too Young to be Tested	--	--	--	32	38	--	41
Not Tested	93	37	13	37	32	14	17
Meeting Program Requirement	7	63	88	61	66	85	81

San Juan (134)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	95	62	91	43	--	82	28
Tested/Needing Treatment/Not Completed (R,RB)	1	8	1	1	--	7	4
Tested/Needing Treatment/ Completed (RC/OK	1	19	0	1	--	0	43
Too Young to be Tested	--	--	--	0	--	--	22
Not Tested	97	10	8	55	100	11	2
Meeting Program Requirement	96	81	91	44	0	82	93

FIGURE D-14 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE FAIRMONT AND MEDFORD PROJECTS

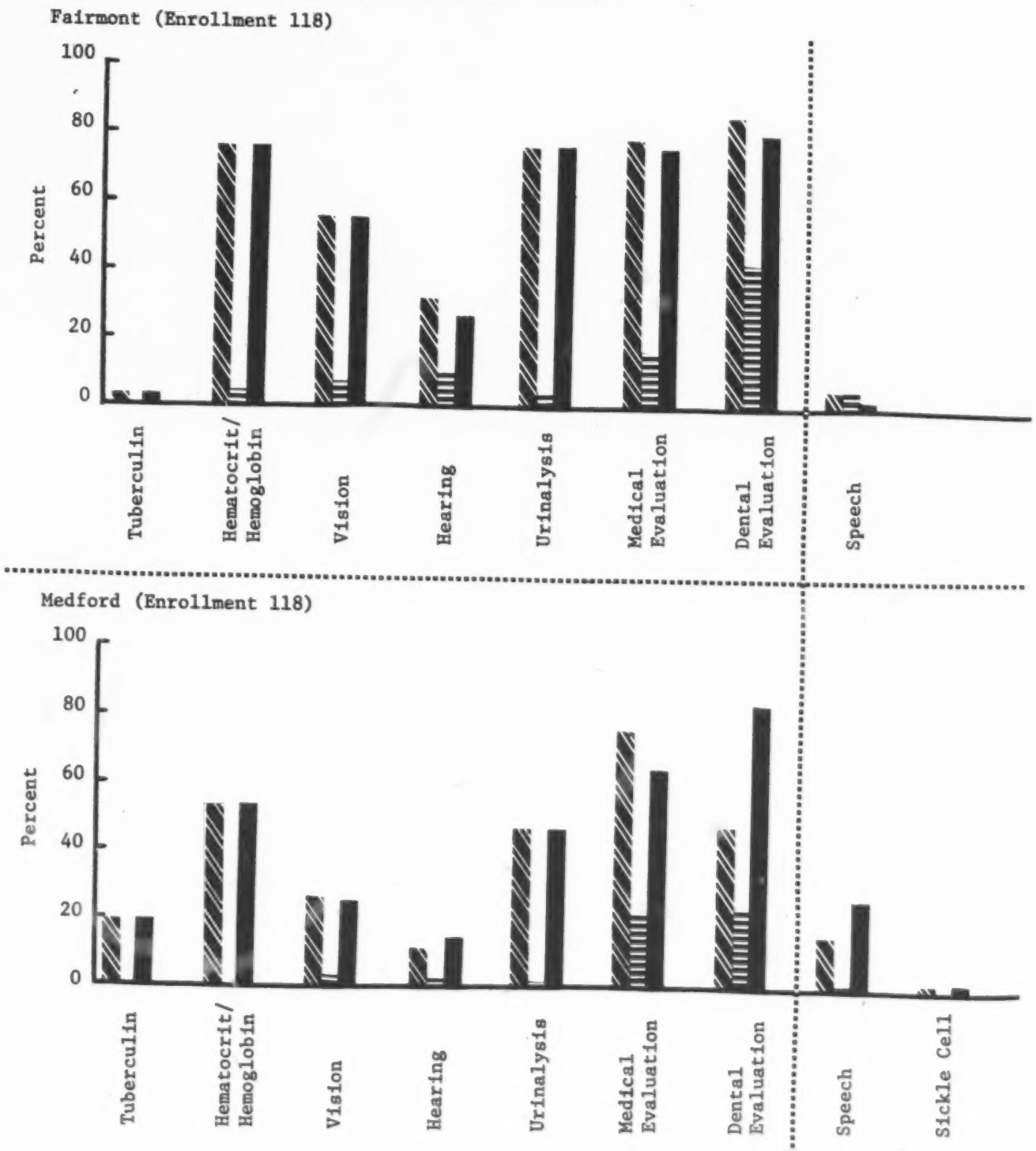


TABLE D-14 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE FAIRMONT AND MEDFORD PROJECTS

Fairmont (118)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	2	73	72	47	21	61	43
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	0	4	2	10
Tested/Needing Treatment/ Completed (RC/OK)	0	3	4	8	6	15	32
Too Young to be Tested	--	--	--	0	0	--	4
Not Tested	98	24	24	45	69	22	11
Meeting Program Requirement	2	76	76	55	27	76	79

Medford (118)

% of Children Enrolled	TEST (1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	19	53	47	25	9	53	23
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	2	0	9	7
Tested/Needing Treatment/ Completed (RC/OK	0	0	1	0	2	12	17
Too Young to be Tested	--	--	--	0	4	--	43
Not Tested	81	47	53	74	85	25	9
Meeting Program Requirement	19	53	48	25	15	65	83

FIGURE D-15 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE COOS BAY AND GARDEN CITY PROJECTS

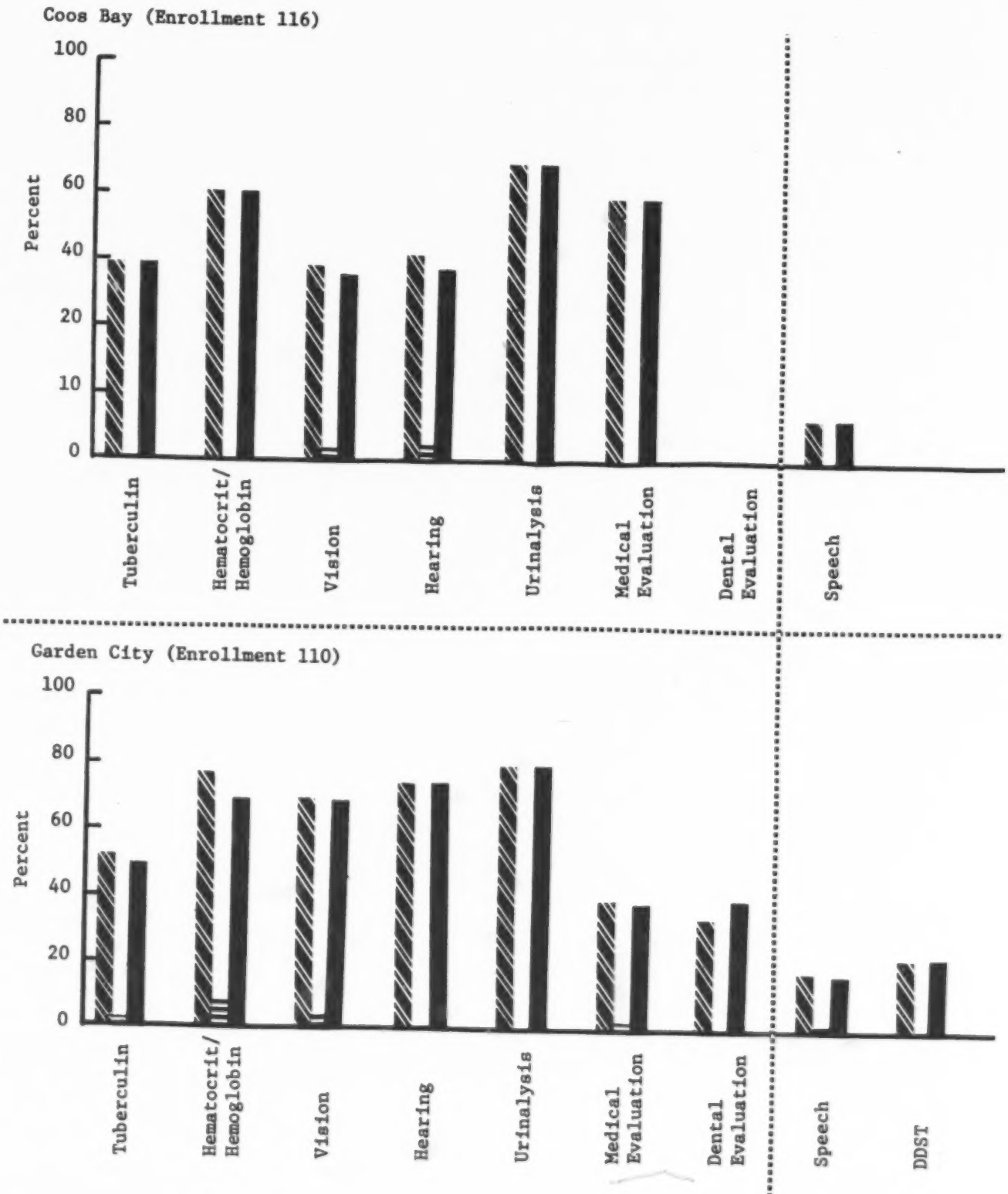


TABLE D-15 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE COOS BAY AND GARDEN CITY PROJECTS

Coos Bay (116)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	39	60	69	35	38	59	--
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	3	4	0	--
Tested/Needing Treatment/ Completed (RC/OK)	0	0	0	0	0	0	--
Too Young to be Tested	--	--	--	0	0	--	--
Not Tested	61	40	31	62	59	41	100
Meeting Program Requirement	39	60	69	35	38	59	0

Garden City (110)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	49	69	79	66	73	38	33
Tested/Needing Treatment/Not Completed (R,RB)	2	9	0	0	0	1	0
Tested/Needing Treatment/ Completed (RC/OK	0	0	0	3	0	0	0
Too Young to be Tested	--	--	--	0	0	--	6
Not Tested	49	22	21	32	27	61	61
Meeting Program Requirement	49	69	79	69	73	38	39

FIGURE D-16 - HEALTH SERVICE DATA FOR CHILDREN ENROLLED IN THE ORLANDO PROJECT

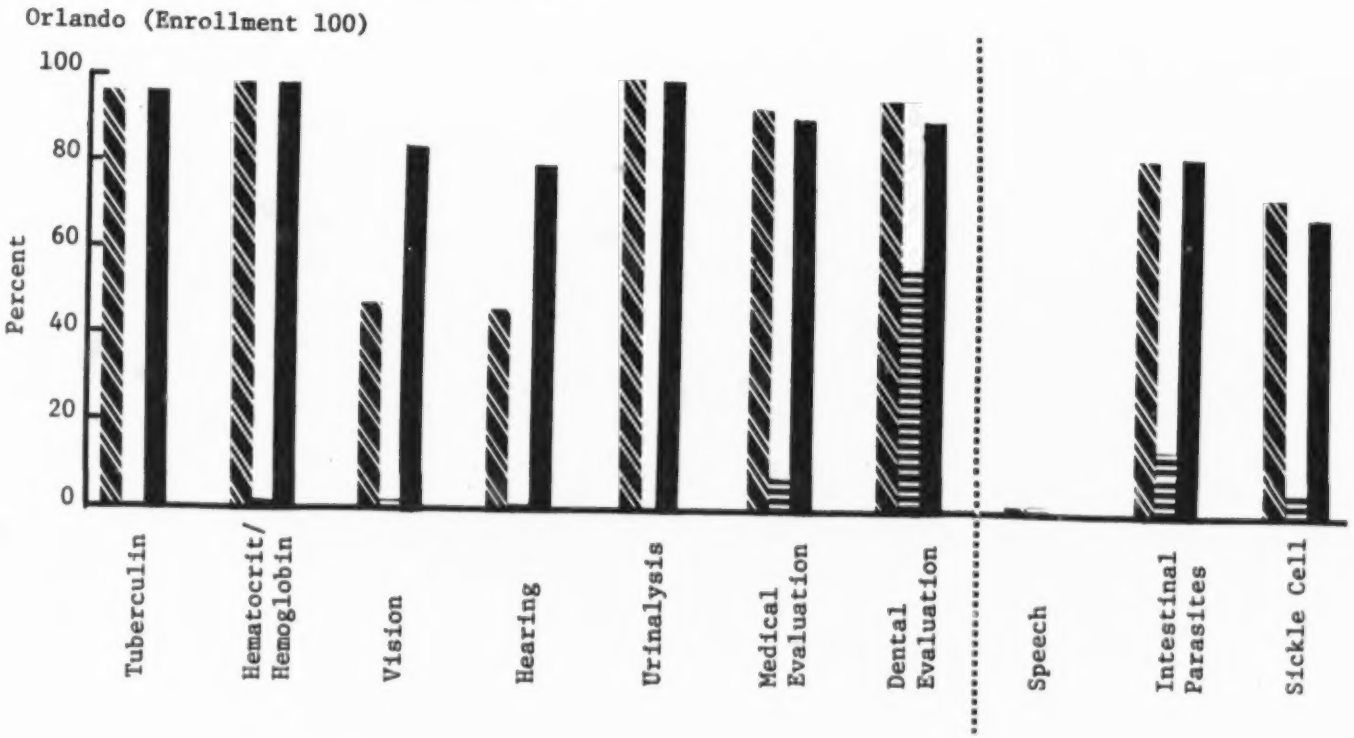


TABLE D-16 - DATA ON REQUIRED HEALTH SERVICES FOR CHILDREN ENROLLED IN THE ORLANDO PROJECT

Orlando (100)

% of Children Enrolled	TEST						
	(1) Tuber-culin	(2) Hemat/ Hemo	(3) Urin-alysis	(4) Vision	(5) Hearing	(6) Evaluation Medical	(7) Evaluation Dental
Tested/OK	96	97	99	45	45	84	38
Tested/Needing Treatment/Not Completed (R,RB)	0	0	0	1	1	2	4
Tested/Needing Treatment/ Completed (RC/OK)	0	1	0	1	0	6	52
Too Young to be Tested	--	--	--	36	34	--	0
Not Tested	4	2	1	17	20	8	6
Meeting Program Requirement	96	98	99	82	79	90	90

TABLE D-17 - PERCENT OF CHILDREN TESTED WHO NEEDED TREATMENT AND PERCENT OF CHILDREN NEEDING TREATMENT WHO COMPLETED TREATMENT

	TB		H/H		Vision		Hearing		Speech		Urin.		Medical		Dental		DDST		Intest. Para.		Sickle Cell	
	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT
Northampton, Mass.	0	0	9	4	27	4	20	6	24	5	7	2	8	5	20	12	-	-	-	-	-	-
Penobscot, Me.																						
(Camp)	0	0	6	4	0	0	0	0	0	0	0	0	7	7	25	15	-	-	-	-	-	-
(Satellite)	0	0	21	11	0	0	0	0	0	0	3	1	13	13	46	46	-	-	-	-	-	-
Toms River, N.J.	0	0	17	11	13	8	5	5	0	0	7	6	11	10	32	22	-	-	16	15	-	-
Albion, N.Y.	0	0	11	1	14	7	3	0	10	0	2	0	52	29	49	34	7	0	44	13	9	2
San Juan, P.R.	2	1	31	22	5	3	0	0	2	0	1	0	8	0	63	57	-	-	29	24	3	2
Baltimore, Md.	1	0	8	6	17	3	5	3	100	0	4	3	0	0	4	1	-	-	-	-	2	2
Fairmont, W.Va.	0	0	4	4	15	15	31	19	100	20	6	6	22	20	49	38	-	-	-	-	-	-
Boone, N.C.	8	8	16	16	14	10	14	10	14	11	5	4	14	14	36	1	20	17	9	9	-	-
Orlando, Fla.	0	0	1	1	4	2	2	0	100	0	0	0	9	7	60	55	-	-	17	17	7	3
Charleston, S.C.	0	0	0	0	5	0	0	0	0	0	0	0	5	3	4	2	-	-	0	0	-	-
Flint, Mich.	1	1	3	.4	7	6	1	1	6	0	12	11	29	14	58	52	9	0	-	-	14	11
Dayton, Ohio	0	0	2	0	2	2	14	3	8	0	0	0	18	4	65	22	-	-	-	-	-	-
Mora, Minn.	0	0	0	0	0	0	0	0	0	0	0	0	2	2	43	42	-	-	-	-	-	-
Dallas, Tex.	3	2	2	1	2	1	1	.6	3	.5	2	0	23	17	34	29	0	0	-	-	1.5	.4
Benton, Ark.	1	0	2	2	4	2	3	3	-	-	6	6	19	18	98	85	-	-	22	21	11	7
Tulsa, Okla.	0	0	1	0	6	0	9	0	14	0	1	0	6	0	20	0	-	-	-	-	-	-
Hammond, La.	0	0	14	12	3	2	1	0	1	0	12	.9	52	46	79	4	1	0	21	17	-	-
Portageville, Mo.	0	0	27	19	1	0	0	0	0	0	0	0	31	19	22	22	-	-	-	-	-	-
St. Louis, Mo.	0	0	9	9	5	3	3	2	4	2	1	1	14	5	31	25	-	-	-	-	-	-
Chadron, Nebr.	37	37	3	3	4	1	5	1	6	1	0	0	14	7	27	4	-	-	-	-	-	-
Garden City, Kan.	4	0	12	0	4	4	0	0	5	0	0	0	2	0	0	0	-	-	-	-	-	-
Center, Colo.	0	0	8	7	39	32	5	3	20	0	2	2	65	65	99	96	-	-	-	-	-	-
Cedar City, Utah	0	0	1	0	18	15	24	11	14	6	0	0	1	0	0	0	5	3	-	-	-	-
Tucson, Ariz.																						
(Pima)	0	0	1	.5	0	0	0	0	0	0	0	0	47	16	26	10	-	-	-	-	-	-
(Santa Cruz)	0	0	0	0	0	0	0	0	0	0	0	0	89	0	96	0	-	-	-	-	-	-
Hillsboro, Ore.	3	3	13	7	10	7	13	11	7	3	15	12	24	13	83	63	8	3	17	17	-	-
Medford, Ore.	0	0	0	0	6	0	15	15	6	0	2	2	28	16	56	36	-	-	-	-	0	0
Coos Bay, Ore.	0	0	0	0	7	0	9	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-
Pasco, Wash.	2.4	1.6	2	2	3	0	19	10	-	-	0	0	27	11	17	4	-	-	-	-	-	-
The Dalles, Ore.	2	0	20	14	29	5	9	2	30	3	1	1	7	5	52	18	23	0	-	-	-	-

NT/T = Needing treatment based on those tested.
CT/NT= Completing treatment based on those needing treatment.

(Continued)

TABLE D-17 - PERCENT OF CHILDREN TESTED WHO NEEDED TREATMENT AND PERCENT OF CHILDREN NEEDING TREATMENT WHO COMPLETED TREATMENT

	Behav. MR		Orth.		Lead		Strep		Psych.	
	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT	NT/T	CT/NT
Northampton, Mass.										
Penobscot, Me.										
(Camp)										
(Satellite)										
Toms River, N.J.										
Albion, N.Y.										
San Juan, P.R.	-	-	-	-	0	0				
Baltimore, Md.										
Fairmont, W.Va.										
Boone, N.C.										
Orlando, Fla.										
Charleston, S.C.										
Flint, Mich.										
Dayton, Ohio	100	0	100	0						
Mora, Minn.										
Dallas, Tex.										
Benton, Ark.										
Tulsa, Okla.										
Hammond, La.										
Portageville, Mo.										
St. Louis, Mo.	-	-	-	-	0	0				
Chadron, Nebr.										
Garden City, Kan.										
Center, Colo.										
Cedar City, Utah	-	-	-	-	-	-	12	9	22	22
Tucson, Ariz.										
(Pima)										
(Santa Cruz)										
Hillsboro, Ore.										
Medford, Ore.										
Coos Bay, Ore.										
Pasco, Wash.										
The Dalles, Ore.										

NT/T = Needing treatment based on those tested.
CT/NT= Completing treatment based on those needing treatment.

Tulsa Data

Attachment to
Appendix D

One of the major requirements in the Health Start program was to provide tests and screening to all children enrolled in the program and treatment for the health problems found. Appendix D presents the health service data for all tests - required and optional - for all projects. The seven required tests appear first on the bar graphs (pp. D-1-16) with the optional tests separated by a dotted line. The projects are presented in descending order of size so that it is possible to compare large projects with other large projects and small projects with small projects. The first set of bar graphs show the percent tested based on enrollment, percent needing treatment based on those tested and percent completed. The completed figure is based on enrollment and including all the children who were tested and needed no treatment ("OK"), those needing treatment and completing treatment and for three exams (dental, hearing and vision) those either indicated as "too young" on the health control forms or in the dental area, those calculated by the Urban Institute as being under 36 months of age at the beginning of the program year.

The Tulsa project needs special note. Because the grantee was funded as a computerized multiphasic screening and <u>referral</u> program, information on follow-up treatment was not reported. As a result, the bar for completion of tests represents <u>only</u> those children who were "OK" - needing no treatment. It does not include children whose treatment is complete (even though it is possible that some of the children may have completed all necessary treatment). The attachment to this appendix describes in more detail the tabulation of the Tulsa data.

The bar graphs from pp. D-17-26 show data on treatment needed and treatment completed for each required and optional test. The percentages are based on those receiving each test. As was mentioned in Chapter IV,

the highest incidence of problems was in the dental and medical area. Interestingly enough, the two projects giving lead poisoning screening found no children with positive tests.

D-39
Attachment

THE URBAN INSTITUTE 2100 M STREET, N.W. WASHINGTON, D.C. 20037 (202) 223-1453

January 20, 1972

Shirley Burger, R.N.
Health Coordinator
Tulsa City-County Health Department
4616 East 15th Street
Tulsa, Oklahoma 74112

Dear Shirley,

When we visited your project in October, we discussed the reporting data required from the project conducted under your Health Start grant. I have had time to review your forms and here is a brief description of the data needed. Since some of it can be keyed to your September 29 letter to Gene Casey, I have included an annotated copy of that letter as an attachment.

From the data runs described in that letter, simply send us the total number of children failing in each of your categories 1 - 11. From page 2 of that letter, we would like the number failing each of items 31-32, 33, 34, and 35. In addition, please give the total number of referrals due to Items 39-52 and 88-96. From your question 6 on page 2 of that letter, send us the total number of children with <u>any</u> failure marked.

To be comparable with other projects, we will also need the total of children with <u>no mark</u> in each of 31-32, 33, 34, 35, 19-30, 39-66, 67-70.

From your <u>Health Start Questionnaire</u>, a cross tabulation is needed. This tabulation would show each of the seven answers in Item (78) (income last year) both by total people giving that answer and tabulated by the answer to Item (29-30) (Number of Children in Family). That is, totals of children within each income group and totals within each income group for each number of children in family.

To evaluate follow-up, we need to know (only in totals for each group of referrals) how many become positive diagnoses, were treated, and completed treatment.

Gene probably has most of this already. If there are any questions, call me collect at (202)223-1950, extension 291.

Sincerely,

Joe Nay

The Tulsa project, a mass multiphasic screening and referral program, computerized the results of the screening efforts. Because the Health Start project was only one component of a larger public health department service program, the print-out sent to the Urban Institute included background information (name, age, sex, race and address) of the child screened by the Health Start program. At the request of the Institute (see Attachment B-1) Tulsa provided some (but not all) of the comparable data reported by other Health Start projects (see Attachment B-2). For example, data are reported by units of service, not by child. Also the medical services are broken down differently than they are on the Urban Institute health control forms.

The numbers screened for each test were taken from column "M", the "OKs" (children who received tests/screening and needed no treatment) from columns "A" & "F", the "Rs" (received test/screening and need treatment) from columns G & I and the "RBs" (received test/screening and treatment begun) from columns C & H. The medical screening data were calculated by averaging the following "procedures:" cardioscan, ENT, orthopedic, sundry medical problems. The urinalysis data are averages of the protein and sugar tests; the vision screening data are averages of the snellen and eye coordination tests.

HEALTH START PROGRAM

Procedure	Total Number Screened	A. Passed		B. Referred		C. Failed Already Under Treatment **		D. Patients Completing Referrals: Total Completed		E. Diagnosis Confirmed (Positives)		F. Diagnosis Not Confirmed (False Positive)		G. Examined-No Information Regarding Diagnosis		H. Diagnosis Confirmed Treatment Instituted		I. Referrals Not Completed: Total Not Completed		J. Patient Did Not Follow Thru on Referral		K. Moved-Unable to Locate		L. Others ***	
		No.	% of M	No.	% of M	No.	% of M	No.	% of B	No.	% of D	No.	% of D	No.	% of D	No.	% of E	No.	% of B	No.	% of I	No.	% of I	No.	% of I
1. Vision a. Snellen Chart b. Eye Coordination or any other eye problems	1803	1710	95	78	4	15	1	24	31	8	33	12	50	4	17	8	100	54	69	42	78	3	6	9	16
	1803	1640	91	139	8	24	1	16	12	2	13	3	19	11	69	2	100	123	88	99	80	2	2	22	18
2. Audiometric	1741	1554	89	172	10	14	1	56	33	21	38	32	57	3	5	21	100	116	67	114	98	2	2	0	0
3. Cardiogram	1803	1719	95	82	5	2	0	18	22	6	33	1	6	11	61	6	100	64	78	57	89	2	3	5	8
4. Dental	1803	1440	80	330	18	33	2	148	45	93	63	4	3	51	34	51	55	182	55	173	95	9	5	0	0
5. E.N.T.	1803	1734	96	53	3	17	1	42	79	20	48	0	0	22	52	20	100	11	21	9	82	1	9	2	18
6. Hematocrit	1803	1767	98	37	2	0	0	26	70	18	69	7	27	1	4	18	100	11	30	11	100	0	0	0	0
7. Urine - Protein	1803	1753	97	49	3	1	0	31	63	5	16	21	68	5	16	5	100	18	37	16	89	1	6	1	6
Sugar	1803	1800	99	3	0	0	0	2	67	0	0	2	100	0	0	0	0	1	33	1	100	0	0	0	0
8. Tuberculin	1726	1717	99	9	1	0	0	9	100	6	67	3	33	0	0	6	100	0	-	0	0	0	0	0	0
9. Speech	1803	1521	84	259	15	23	1	139	54	114	82	21	15	4	3	114	100	120	46	109	91	7	6	4	3
10. Social Development	1803	1749	97	53	3	1	0	20	38	7	35	11	55	2	10	7	100	33	62	15	45	3	10	15	45
11. Orthopedic	1803	1660	92	112	6	31	2	67	60	34	51	13	19	20	30	34	100	45	40	26	58	4	9	15	33
12. Dentry Medical Problems	1803	1675	93	107	6	21	1	60	47	31	62	7	14	12	24	31	100	57	53	48	84	4	7	5	9

* Totals are calculated on figures available as of February 1, 1972

** Patients had been diagnosed prior to screening and parents indicated they were receiving treatment

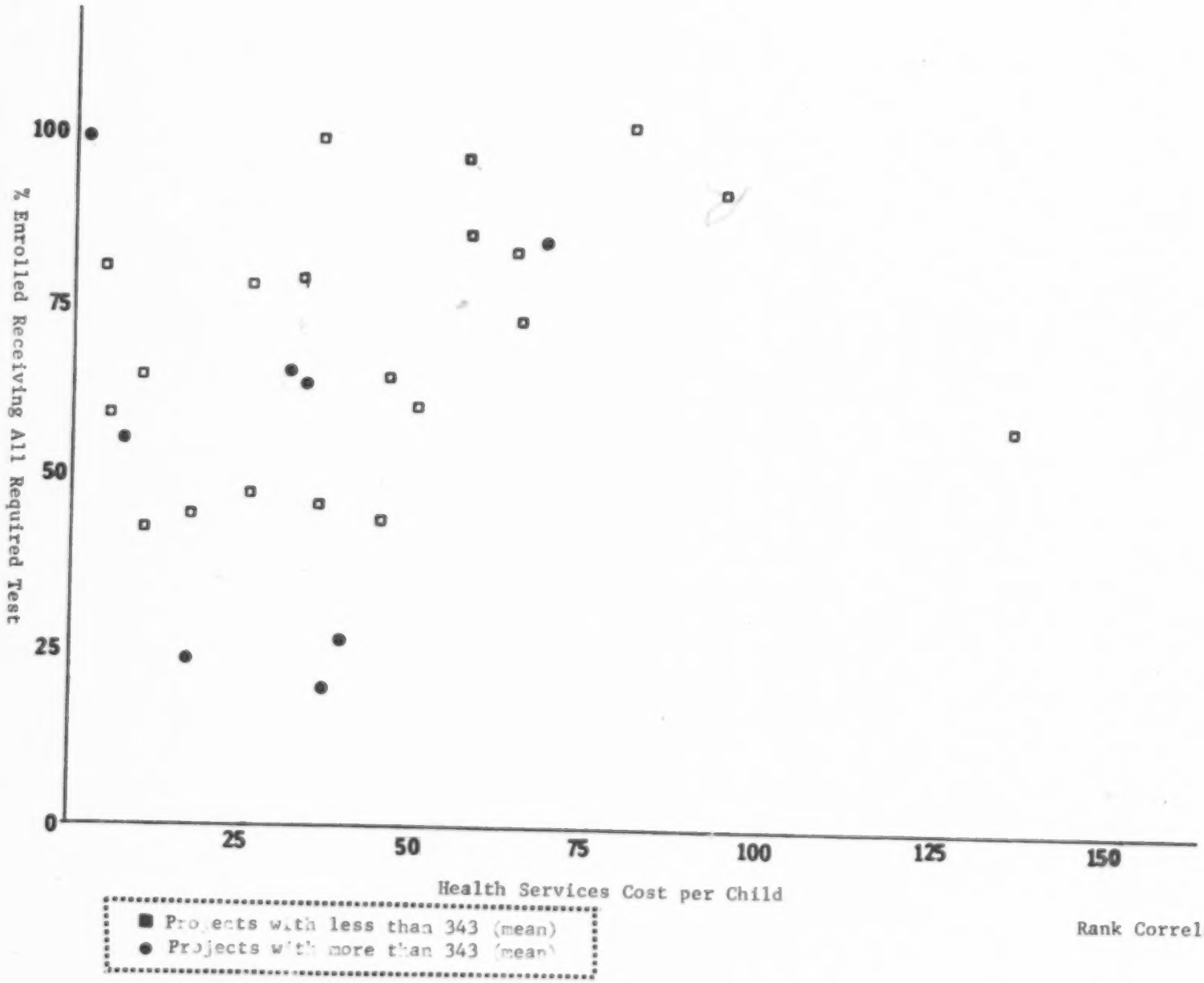
*** Includes no satisfactory referral source located, inadequate finances, pending appointments, etc.

781

APPENDIX E

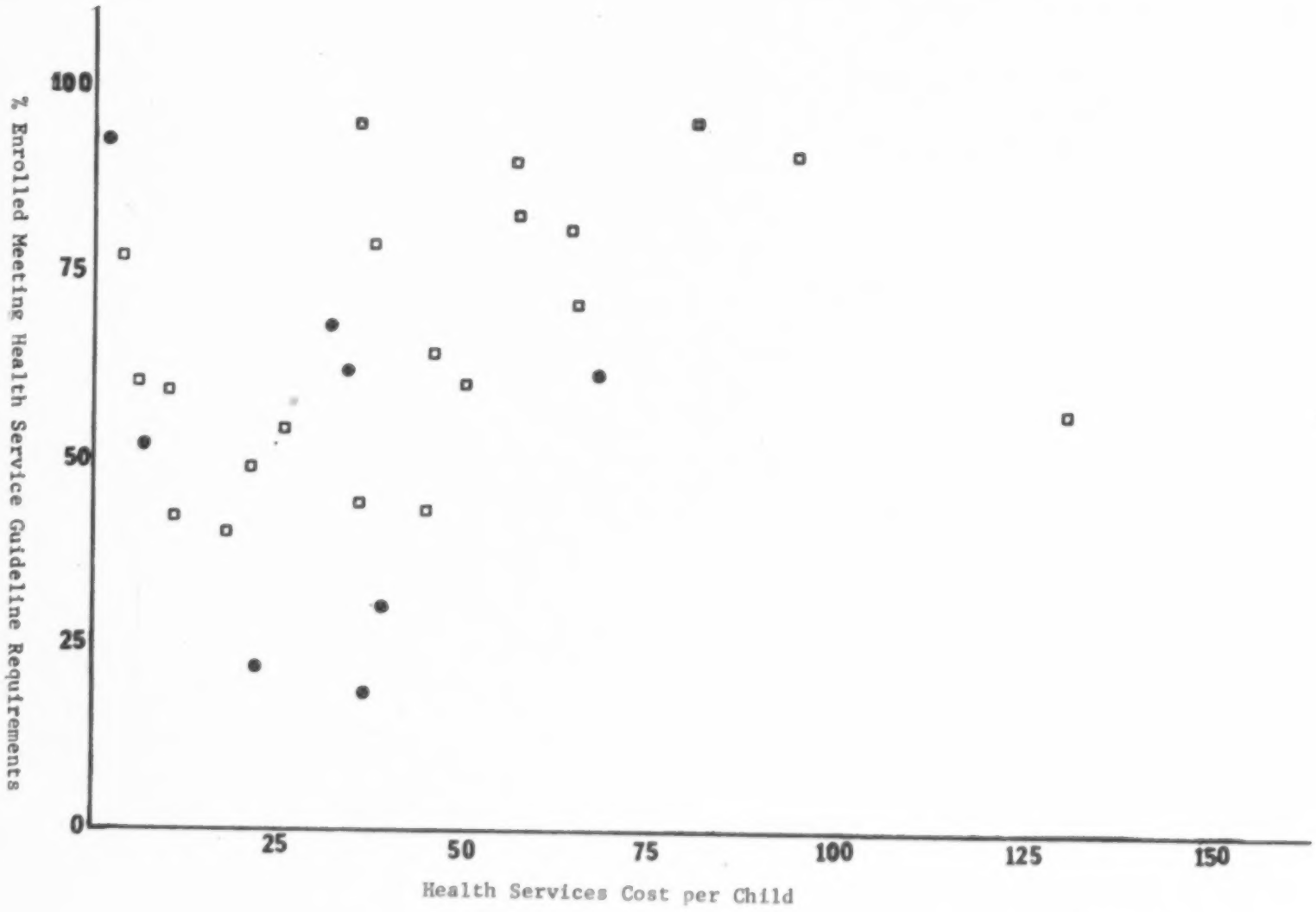
Correlations of Selected Input, Process and Output Variables of Health Start Projects

FIGURE E-1 - PERCENT OF CHILDREN ENROLLED RECEIVING ALL REQUIRED TESTS AND HEALTH SERVICES COST PER CHILD



Rank Correlation= +.3

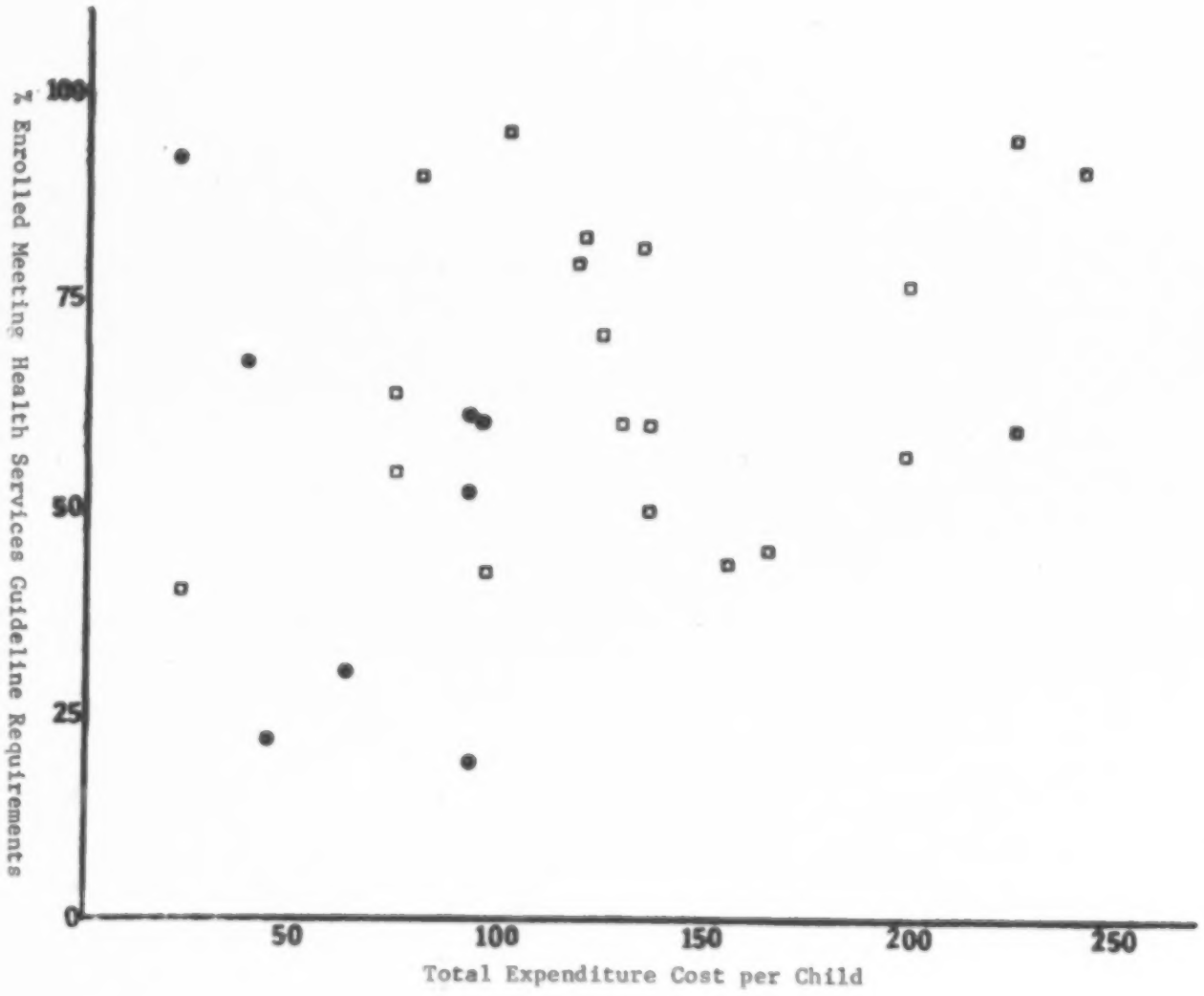
FIGURE E-2 - PERCENT ENROLLED MEETING HEALTH SERVICE GUIDELINE REQUIREMENTS AND HEALTH SERVICES COST PER CHILD



Rank Correlation= +.4

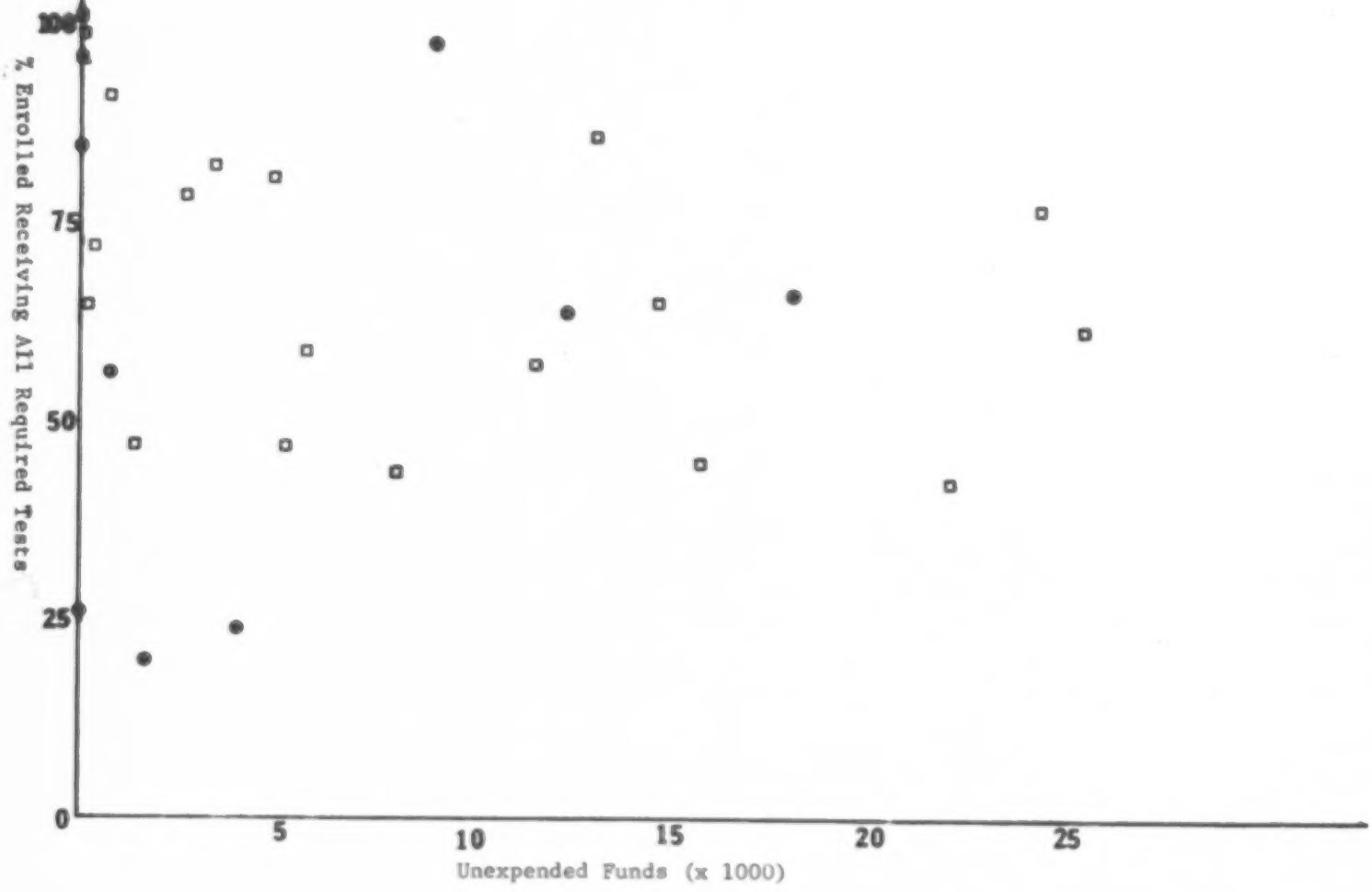
E-2

FIGURE E-3.- PERCENT ENROLLED MEETING HEALTH SERVICES GUIDELINE REQUIREMENTS



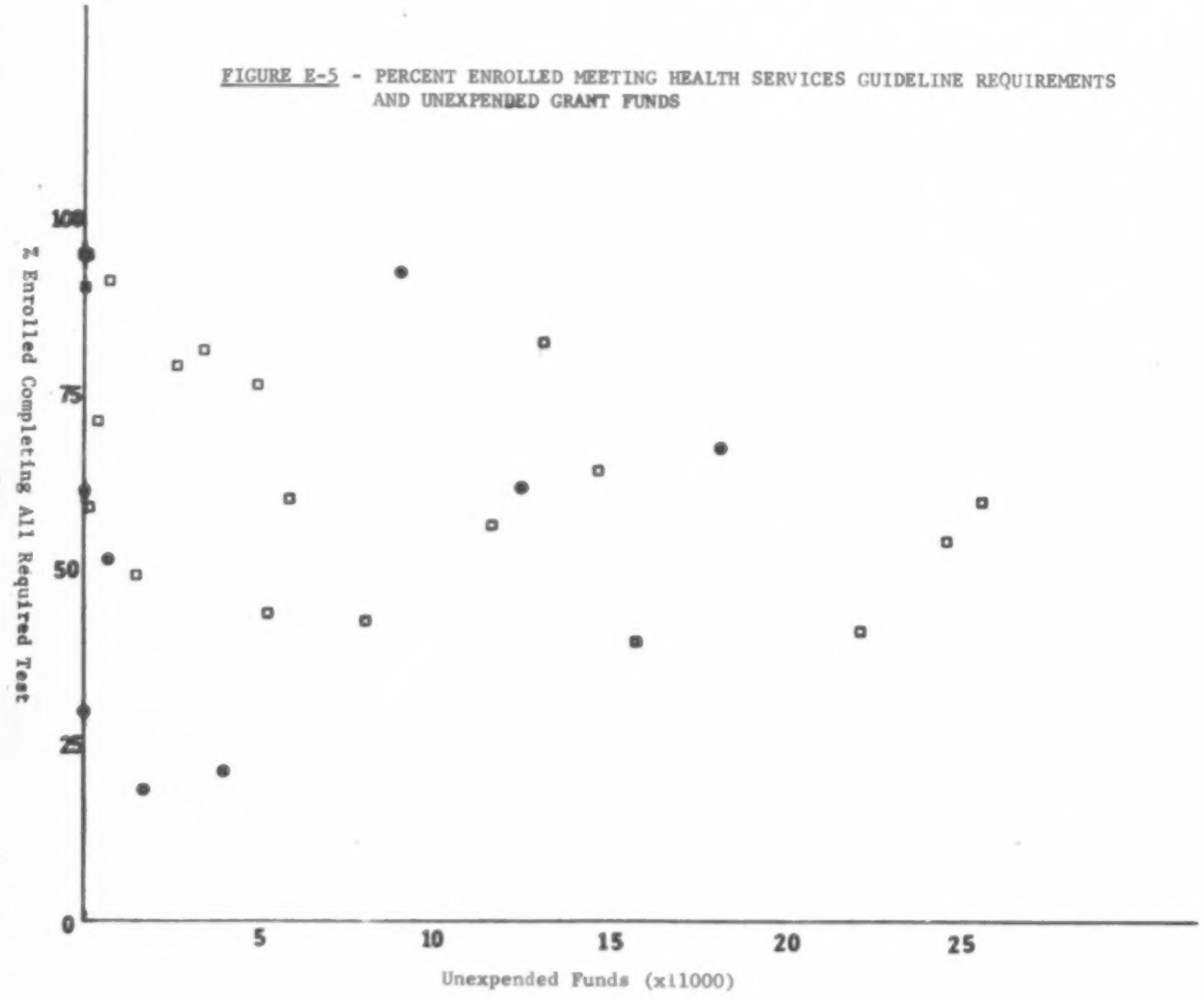
Rank Correlation= +.2

FIGURE E-4 - PERCENT ENROLLED RECEIVING ALL REQUIRED TESTS AND AMOUNT OF UNEXPENDED GRANT FUNDS



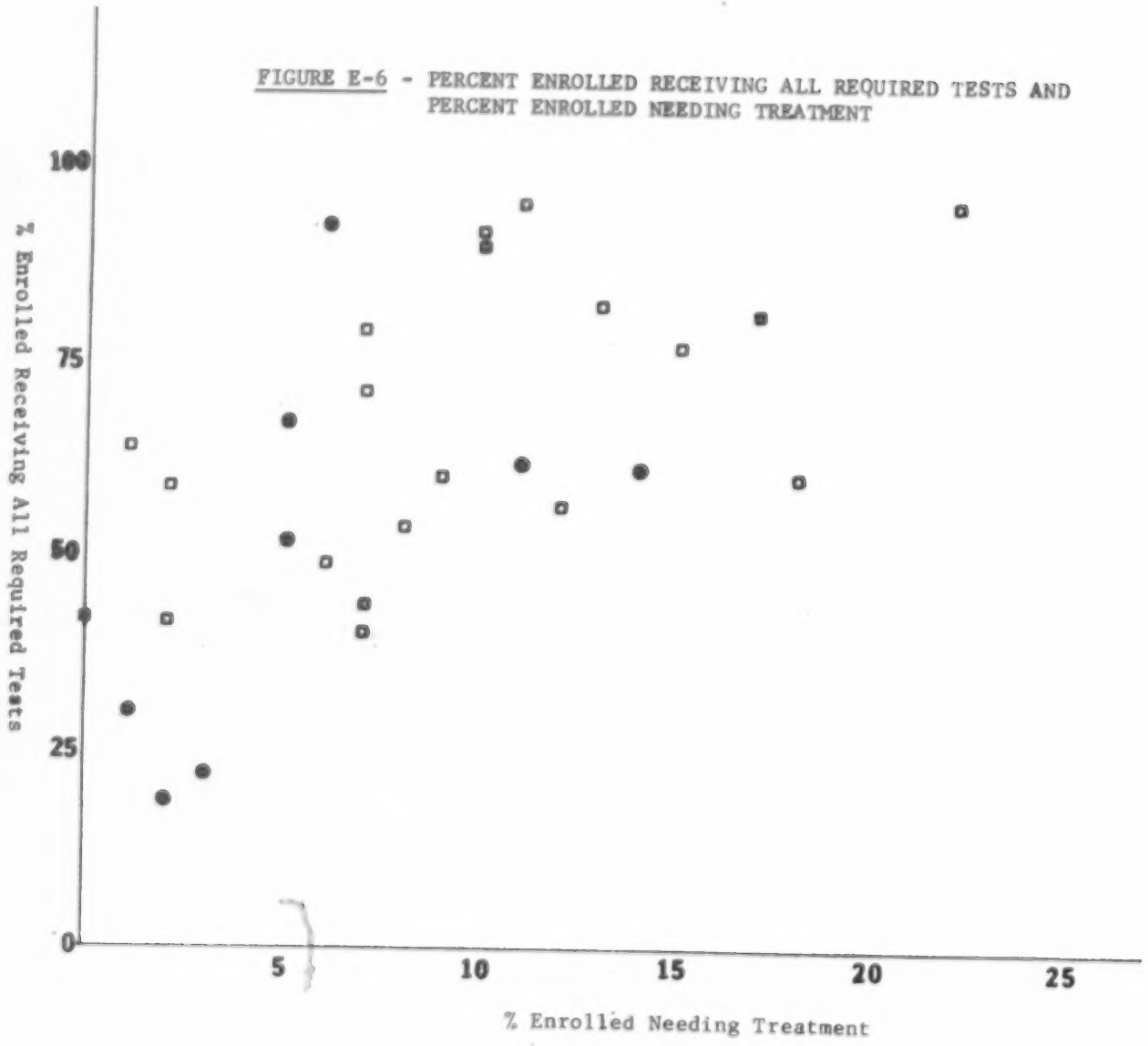
Rank Correlation=-.2

FIGURE E-5 - PERCENT ENROLLED MEETING HEALTH SERVICES GUIDELINE REQUIREMENTS AND UNEXPENDED GRANT FUNDS



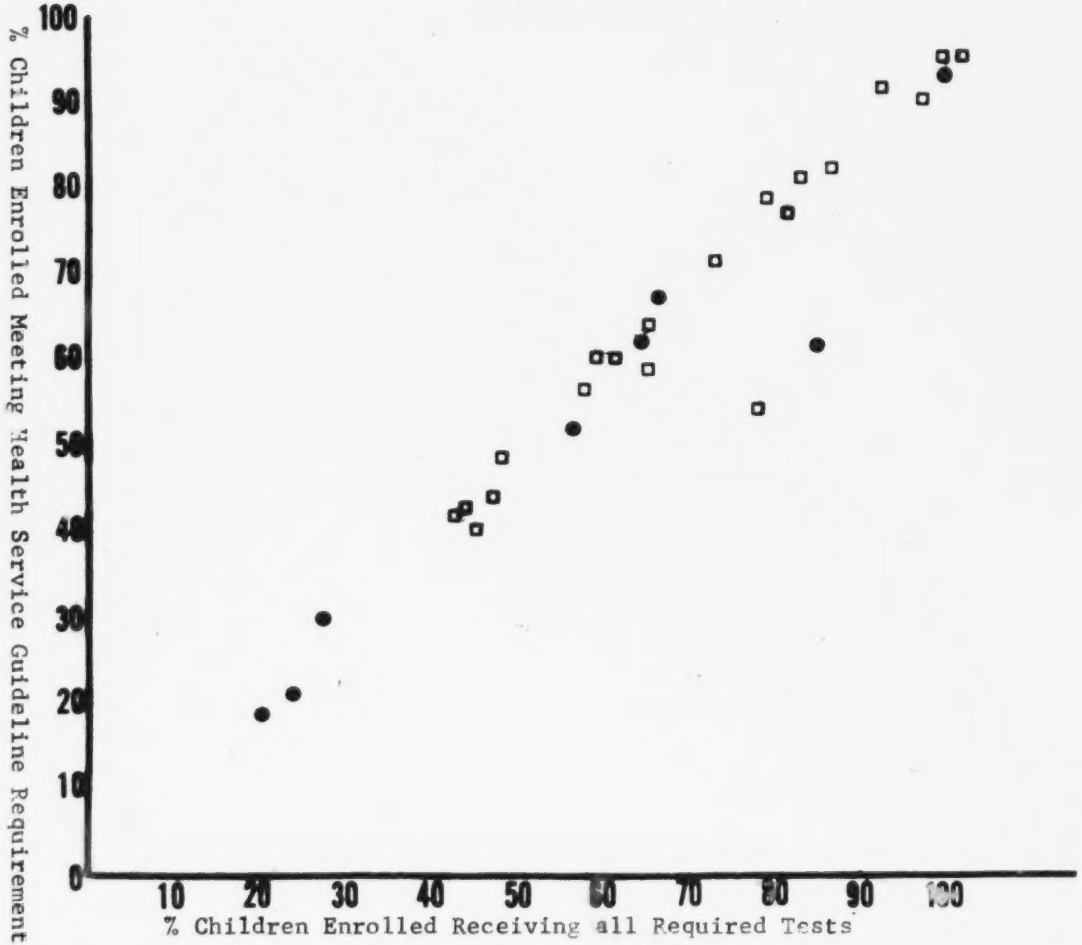
Rank Correlation= -.?

FIGURE E-6 - PERCENT ENROLLED RECEIVING ALL REQUIRED TESTS AND PERCENT ENROLLED NEEDING TREATMENT



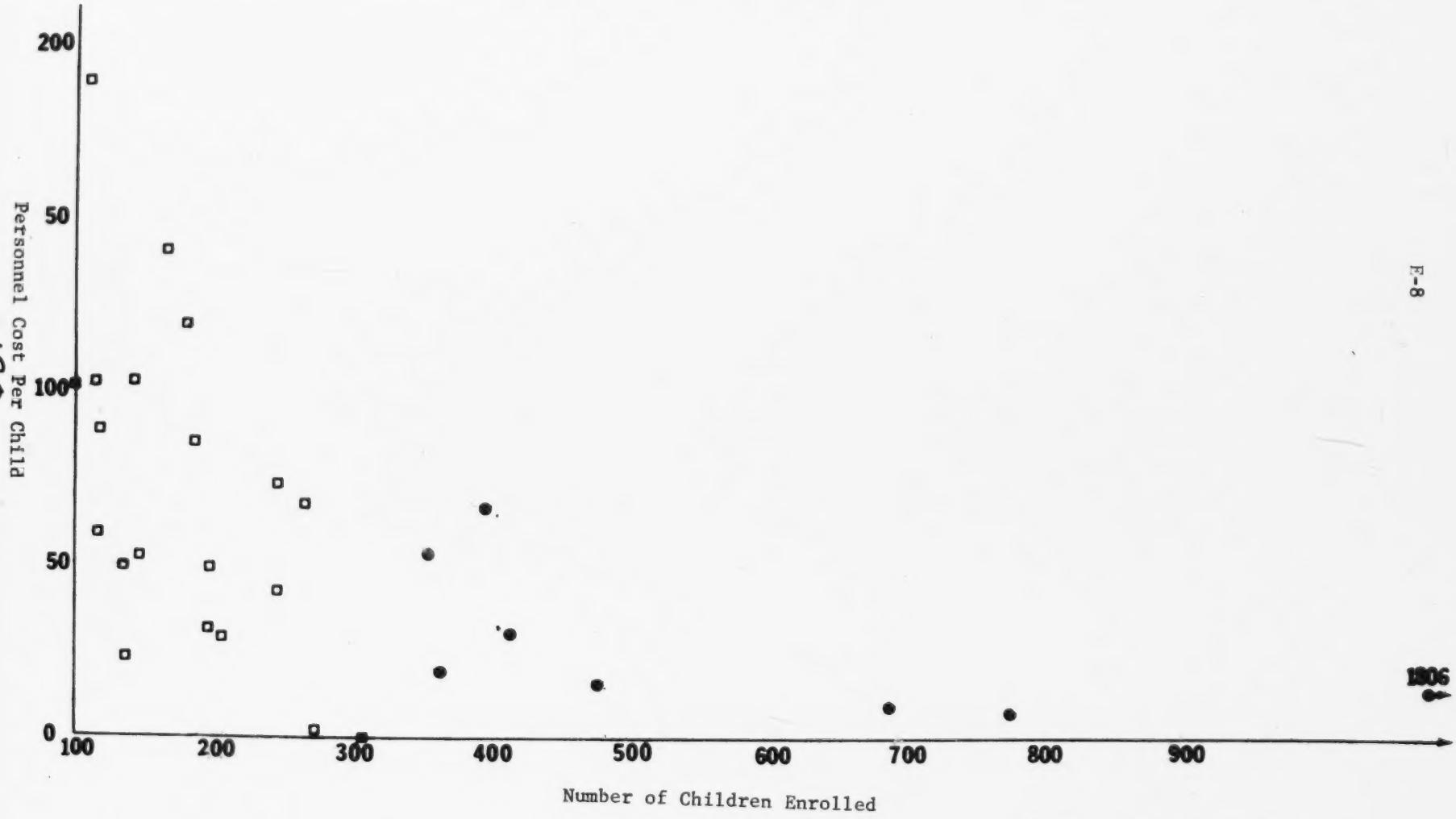
Rank Correlation= .5

FIGURE E-7 - PERCENT ENROLLED MEETING HEALTH SERVICE GUIDELINE REQUIREMENTS AND PERCENT ENROLLED RECEIVING ALL REQUIRED TESTS



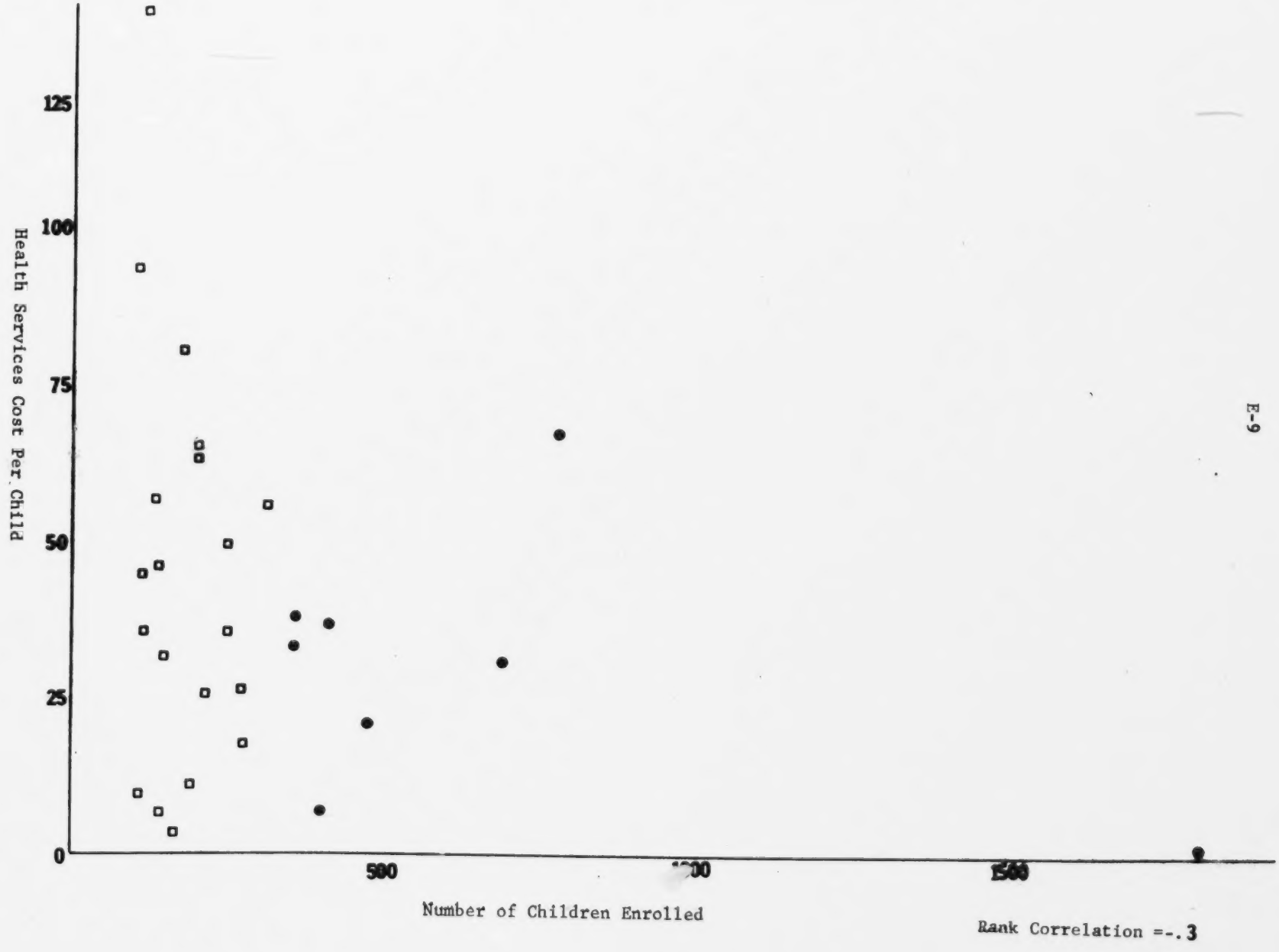
Rank Correlation = +.9

FIGURE E-8 - PERSONNEL COST PER CHILD AND NUMBER OF CHILDREN ENROLLED



Rank Correlation = .7

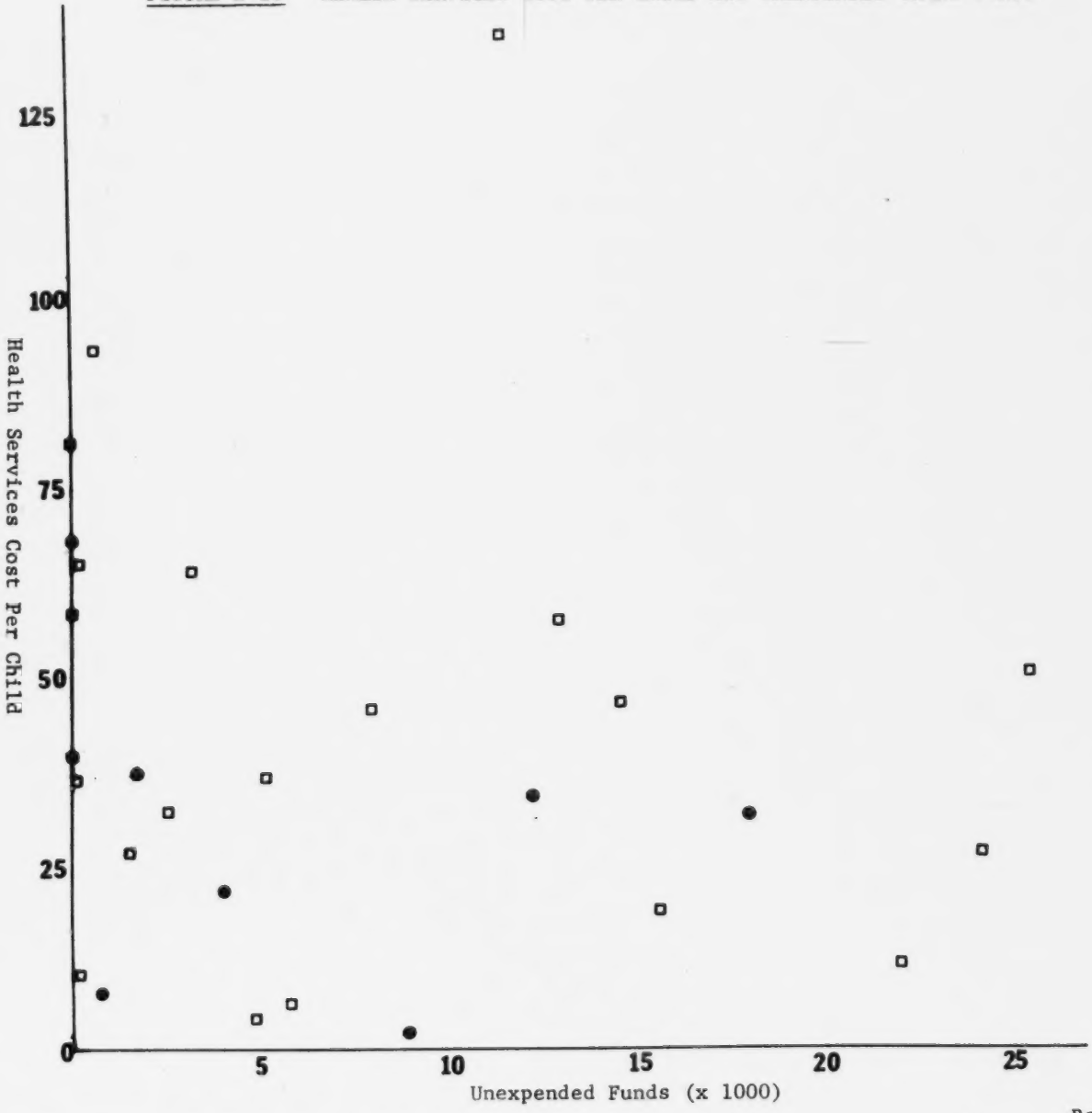
FIGURE E-9 - HEALTH SERVICES COST PER CHILD AND NUMBER OF CHILDREN ENROLLED



Rank Correlation =-.3

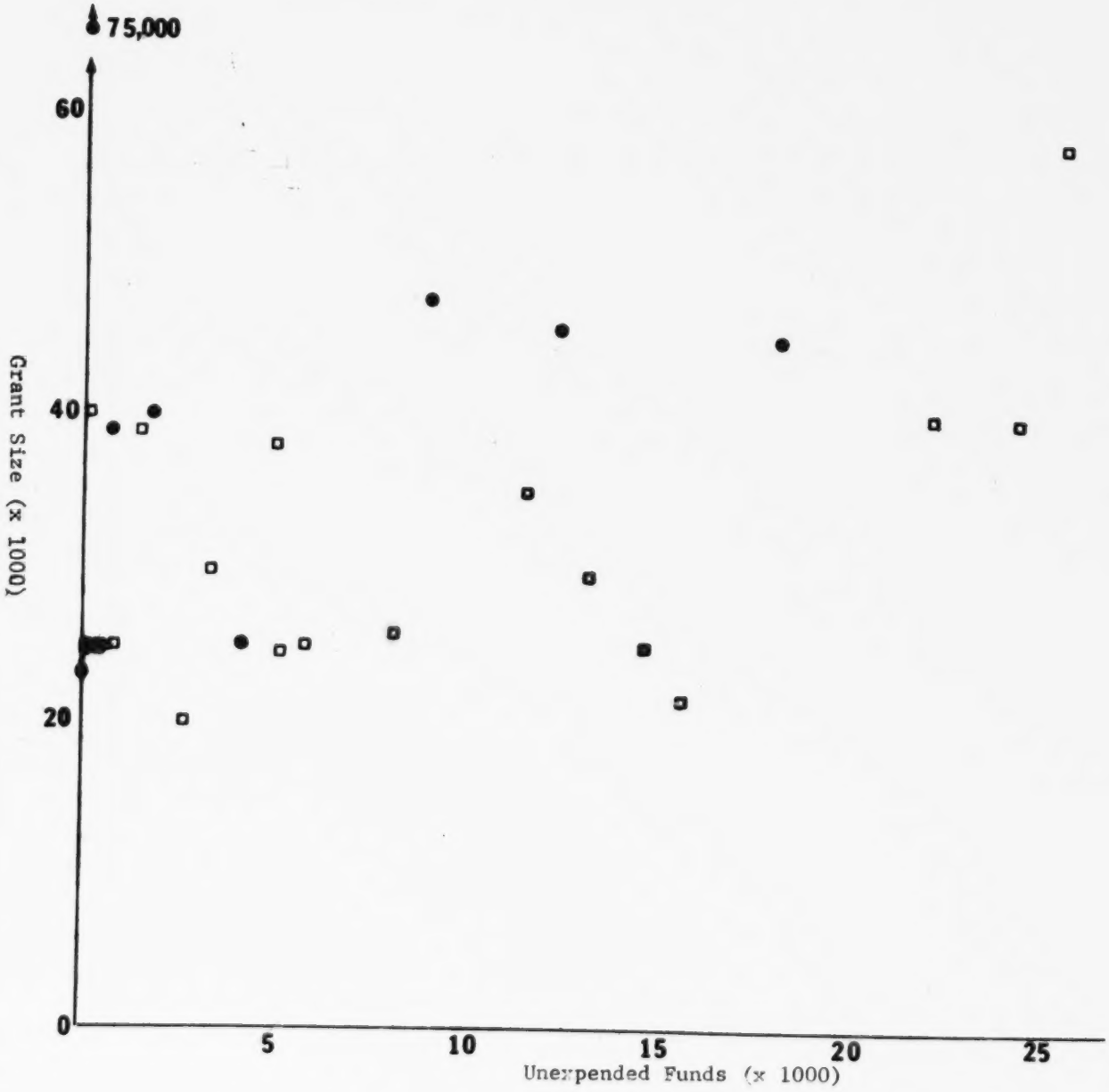
E-9

FIGURE E-10 - HEALTH SERVICES COST PER CHILD AND UNEXPENDED GRANT FUNDS



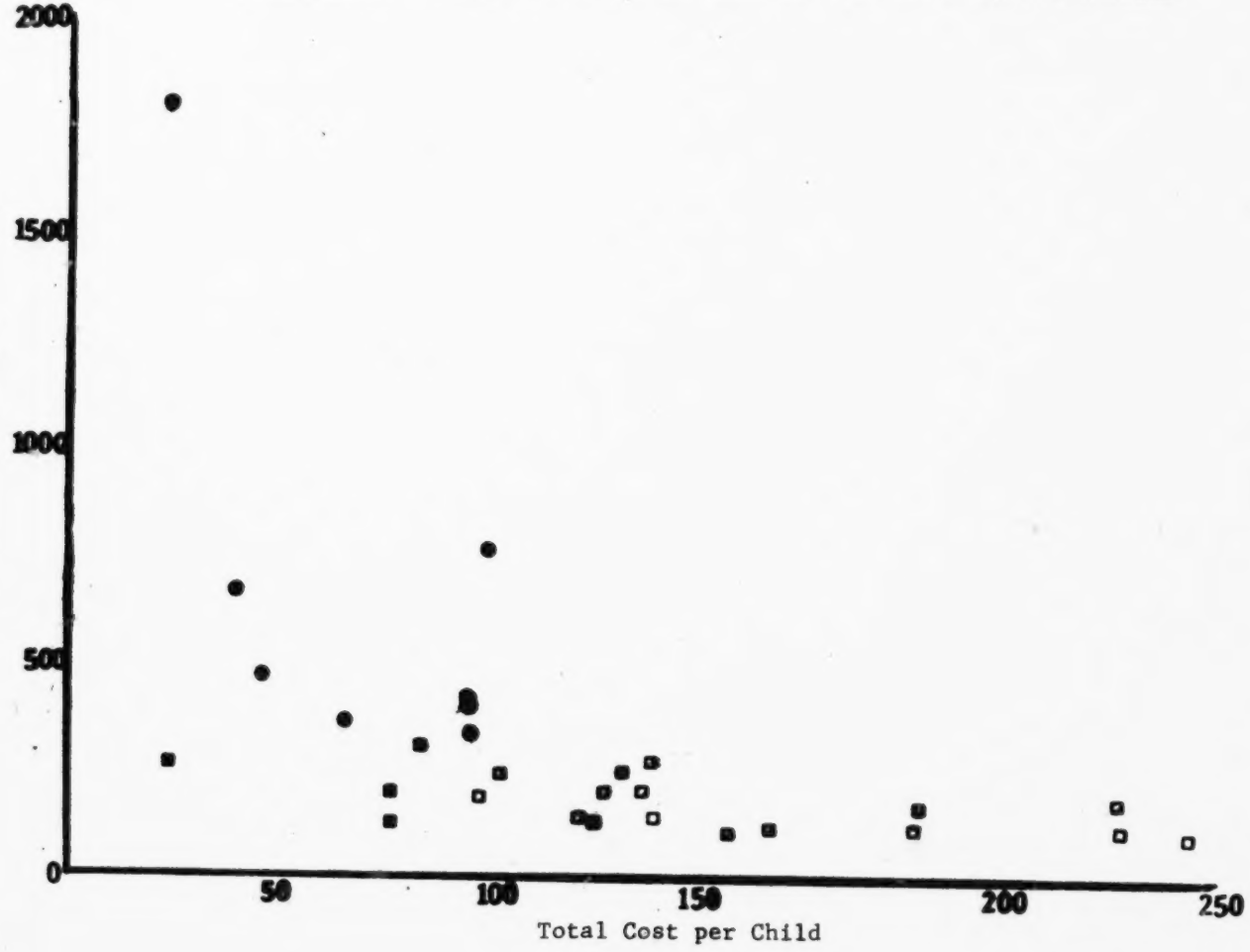
Rank Correlation = +.3

FIGURE E-11 - GRANT SIZE AND UNEXPENDED GRANT FUNDS



Rank Correlation = ▲ .2

FIGURE E-12 - NUMBER OF CHILDREN ENROLLED AND TOTAL COST PER CHILD



Rank Correlation= -.7

APPENDIX F

Urban Institute Reporting System: Background and Control Sheets

Page __ of __

HEALTH PROGRAM CONTROL SHEE

NAME OF HEALTH START CENTER

HEALTH COORDINATOR

DATE (Circle one): J

NAME OF CHILD	DATE OF BIRTH MONTH	DAY	YEAR	TESTS (Use codes indicated at the bott) TUBER-CULIN	HEMA TOCRIT/ HEMO-GLOBIN	VISION	HEARING	SPEECH	URIN-ALYSIS	OTHER (SPECIFY) (1)	OTHER (SPECIFY) (1)	OTHER (SPECIFY) (1)	MEDICAL EVAL-UATION	SPECIFIC MEDICAL PROBLEM (2)	DENTAL EVAL-UATION	I

The following codes are to be used:

[ ] [ ] Space is to be left blank until evaluation or test is performed.

[O] [K] If evaluation or test has been performed and no referral required, enter OK in the spaces. (Includes conditions for which treatment is required but is already underway.)

[R] [ ] If evaluation has been performed and referral for treatment is required, enter an R in the first space in the column.

[R] [B] When treatment has begun but has not been completed, enter a B opposite the R.

[R] [C] When treatment has been completed and no further remedial action is required, enter a C opposite the R.

[R] [C/OK] When treatment has been given and the condition or problem has been corrected or greatly improved, enter C/OK opposite the R.

(1) e.g., tests for intestinal parasites, sickle cell anemia, G6PD, le

(2) Specify as:
- AL (= Allergy)
- BEHAV (= Behavior/Psychiatric)
- CV (= Cardiovascular)
- COMM D (= Communicable Disease)
- DENT (= Serious Dental Problem)
- ENT (= Ear, Nose, Throat)
- GU (= Genito-Urinary)
- METAB (= Metabolic)
- MR (= Mentall Learnin
- NEUR (= Neuro
- NUTR (= Nutri
- ORTH (= Ortho
- RESP (= Respi
- SKIN (= Skin
- SURG (= Gener
- OTHER (= Othe

(3) Immunization OK is defined as follows:
a. D.P.T. - at least three doses of D.P.T. (diphtheria, pertussis the most recent within the past 2 years.
b. Polio - at least 2 doses of trivalent oral polio vaccine or 3 oral polio vaccine plus 1 dose of trivalent vaccine.
c. Measles - 1 dose of live measles vaccine. Naturally occurring "complete" immunization.
d. Smallpox - 1 smallpox vaccination in the past 2 years.

HEALTH PROGRAM CONTROL SHEET

Mail copy to
Joseph S. Wholey
c/o The Urban Institute
2100 M Street, N. W.
Washington, D. C. 20037

Page __ of __

DATE (Circle one): JULY 15/SEPTEMBER 15/DECEMBER 15/MARCH 15/JUNE 15

(Use codes indicated at the bottom of the page when completing these columns.)

OTHER (SPECIFY) (1)	OTHER (SPECIFY) (1)	OTHER (SPECIFY) (1)	MEDICAL EVALUATION	SPECIFIC MEDICAL PROBLEM (2)	DENTAL EVALUATION	IMMUNIZATIONS (3)							FUTURE CARE			REMARKS
						D.P.T.	POLIO	SMALLPOX	MEASLES	GERMAN MEASLES	MUMPS	OTHER (SPECIFY)	MEDICAL (4)	DENTAL (4)	FUNDS (5)	

Page __ of __

HEALTH START PROGRAM BACKGROUND SHEET

NAME OF HEALTH START CENTER

NAME OF CHILD	DATE OF BIRTH			SEX (M, F)	RACE/ MINORITY GROUP (1)	MIGRANT (2)	FAMILY SIZE (Household)	ESTIMATED TOTAL FAMILY INCOME (3)			
	MONTH	DAY	YEAR					BELOW POVERTY LINE	MEDICALLY INDIGENT	OTHER	F T

Use appropriate code or codes:

(3)

(1) B = Black
I = Indian
M = Mexican-American
P = Puerto Rican
W = White
O = Other

(2) Check (✓) if child is a migrant.

A M B A C K G R O U N D S H E E T

Mail copy to:
Joseph S. Wholey
c/o The Urban Institute
2100 M Street, N. W.
Washington, D. C. 20037

Page __ of __

DATE (Circle one): JULY 15/SEPTEMBER 15/DECEMBER 15/MARCH 15/JUNE 15

MIGRANT (2)	FAMILY SIZE (Household)	ESTIMATED TOTAL FAMILY INCOME (3)			MOTHER EMPLOYED?			DATE ENROLLED IN HEALTH START		DATE TERMINATED HEALTH START ENROLLMENT		REMARKS (e.g., reason for termination)
		BELOW POVERTY LINE	MEDICALLY INDIGENT	OTHER	FULL-TIME	PART-TIME	NOT EMPLOYED	MONTH	DAY	MONTH	DAY	

(3) Check (✓) appropriate column

a. Below poverty line -- Use current Federal definition: annual income less than $3,200 for a farming family of four; annual income less than $3,800 for a non-farming family of four; etc. (See Evaluation Handbook.)

b. Medically indigent -- Use following definition: annual income between $3,200 and $4,800 for a farming family of four; annual income between $3,800 and $5,700 for a non-farming family of four; etc.

c. Other -- annual income more than 150% of poverty line.

APPENDIX G

Urban Institute Reporting System:
Fiscal Reporting Format

THE URBAN INSTITUTE 2100 M STREET, N.W. WASHINGTON, D.C. 20037 (202) 223-1950

March 10, 1972

Dear Health Coordinator:

Enclosed is a copy of our first formal report on the Health Start program. This interim report was based on September 15 reporting data and on information gathered through December. We would appreciate your comments on the report, and since the final report on this year's program will not be issued until June it can reflect comments which we receive.

The December reporting data have been analyzed subsequent to the publication of the report. They will appear in a supplement to the interim report.which you will be receiving shortly.

Since you are now preparing your March 15 reports, we would appreciate your consideration of a few items that could help speed our analysis and, in turn, quickly inform your respective regional offices of your status and progress. They are:

(1) Make sure that the entries are legible and readable.

(2) Use the codes listed on the control sheets.

(3) Identify children who are too young to receive a service (e.g., dental) as "TY."

(4) When using an automatic copier, make sure that part of the information is not omitted.

When many of the projects were visited, only portions of the grant funds had been expended. In order for planning to be more realistic in the coming year, we need to do a cost analysis of each project. Leona Vogt has prepared a reporting form to capture the actual disposition of the Health Start grant money and use of other resources in the project. It is assumed that your bookkeeper can complete the grant portion of the form. Instructions are attached to the form; if you have any questions, call Leona for help. If possible, try to get these fiscal data back to us by March 31.

If you have questions, call Leona or me collect at (202) 223-1950. Thanks for your cooperation.

Sincerely,

Joe Nay

Joe Nay

Enclosures:

INSTRUCTIONS FOR REPORTING
FISCAL YEAR

1. Please have the bookkeeper fill in the grant expenditure columns by entering the amount of the OCD Health Start grant already expended and committed but not yet expanded for each item in the two respective columns.

2. The Health Coordinator will have to fill in the information on the numbers of children receiving services through the grant and numbers of children receiving services from other sources. If this amount of service from other sources is known, enter it in the last column. In every case, show at least the agencies or individuals providing other resources and the number of children being served by each provider. If there are several providers for one service, include them and number of children being served by them on an additional paper.

HEALTH START EXPENDITURES

HEALTH START PROJECT _____

Item	Health Start Grant Expenditures			Other Federal, State & Local Funds & Services Provided		
	Number of Children (2)	$ Expended to Date	$ Committed to Date	Number of Children (2)	Provider(s)	$ Amount if Known
TOTAL PERSONNEL COSTS	NA			NA	NA	
Salaries and Wages (Total)	NA			NA	NA	
Coordinator	NA			NA		
Other (1)	NA			NA		
	NA			NA		
	NA			NA		
Fringe Benefits	NA			NA	NA	
Consultants	NA			NA		
TOTAL NON-PERSONNEL COSTS	NA			NA	NA	
Health Services						
Laboratory Tests						
Medical Evaluations						
Dental Evaluations						
Immunizations						
Follow-up Dental						
Follow-up Hearing						
Follow-up Speech						
Follow-up Vision						

(1) Identify by job title.
(2) Indicate number of children receiving each service.

Item	Health Start Grant Expenditures			Other Federal, State & Local Funds & Services Provided		
	Number of Children (2)	$ Expended to Date	$ Committed to Date	Number of Children (2)	Provider(s)	$ Amount if Known
-Follow-up Medical (3)						
Travel	NA			NA		
Space Costs and Rentals	NA			NA		
Consumable Supplies	NA			NA		
Rental, Lease, Purchase of Equipment	NA			NA		
Health Education (if costs separate from above)						
Food						
Other Costs						
TOTAL COSTS	NA			NA		

(3) To the extent possible, specify the problems treated as:

AL (= Allergy)
BEHAV (= Behavior/Psychiatric)
CV (= Cardiovascular)
COMMD (= Communicable Disease)
DENT (= Serious Dental Problems)
ENT (= Ear, Nose, Throat)
GU (= Genito-Urinary)
METAB (= Metabolic)
MR (= Mentally Retard/Learning Disability)
NEUR (= Neurological)
NUTR (= Nutritional)
ORTH (= Orthopedic)
RESP (= Respiratory)
SKIN (= Skin Disorder)
SURG (= General Surgical)
OTHER (= Other)

207

APPENDIX H

Urban Institute Recommendations to OCD Concerning the Future of Health Start

THE URBAN INSTITUTE 2100 M STREET, N.W. WASHINGTON, D.C. 20037 (202) 223-1950

February 15, 1972

Mr. Richard Orton
Director
Project Head Start
Office of Child Development
400 6th St., S.W.
Washington, D.C. 20013

Dear Mr. Orton:

Before the Health Start guidelines are issued, there are some important questions that should be addressed in relation to the operation of the Health Start program. One of these is whether there should be "planned variation" (testing a number of alternative program models specified in advance) or "natural variation" (allowing projects to do their own thing) in the second program year. Allowing "natural variation" leads to the development of many program models, less planning is involved, but the evaluation would be more difficult and less likely to be conclusive.

In the first year of Health Start, it was difficult to determine what OCD intended to test, but enough natural variations occurred among projects in the approaches taken and the services used that several interesting hypotheses emerged which would be worth testing.

Just as in the first year, it is expected that something could be learned from natural variations that occur across projects. However, in order to obtain a high degree of confidence in estimates of the effects of different variables, it is necessary to decide what is to be tested and to plan the types of projects needed to bring about the desired tests.

One of the important technical problems in designing an experiment or conducting an evaluation is to insure that there are adequate number of projects of each type. If the number of projects is small, as in Health Start, this leads to planned variation in the design and selection of projects - in order to insure an adequate number of projects with each of the characteristics where effects are to be tested. Whatever one's measures of success (e.g., cost and completion rates), a definitive evaluation will be impossible without a number of projects of different types.

If, for example, it were desired to test the effects of two variables: (1) detection system used /mass multiphasic screening, mixed screening, or full medical and dental exams/, (2) area medical resources /many, some, or few/, a planned variation design could be used to insure that projects exhibiting all states of both variables occurred in sufficient number to be analyzed. This would be done by selecting (say) at least 18 projects distributed as shown in Figure 1:

		Local Resources		
		Many	Some	Few
Detection Screening	Mass Multiphasic Screening	2	2	2
	Mixed Screening	2	2	2
	Full Exams	2	2	2

Figure 1

If it were further desired to test the effects of an additional variable, for instance (3) regional office coordination /heavy, or little regional office help/, another dimension would be introduced into the design. For the three variables discussed here, this could be accomplished by selecting (say) 36 projects distributed as shown in Figure 2:

Heavy Regional Office Coordination

	Local Resources		
	Many	Some	Few
Detection Screening			
←Multiphasic→	2	2	2
←Mixed →	2	2	2
←Exams →	2	2	2

Without Regional Office Coordination

	Local Resources		
	Many	Some	Few
←Multiphasic→	2	2	2
←Mixed →	2	2	2
←Exams →	2	2	2

Figure 2

This would provide 18 projects with and 18 projects without heavy regional office coordination and technical assistance - 6 projects in each row or column. The numbers are probably reasonable for many of the analyses that would be desired by OCD.

While this example may seem complicated, the point is simple. The effects of only a few variables can be tested in a small program. With planned variation, an efficient experimental design can allow the possibility of testing the effects of two or three important variables. Without such planned variation, a number of the cells in the design would probably include no projects and the chance of a useful test of OCD hypotheses would thereby be reduced.

The difficulty of measuring the resources available in an area might dictate reducing variable (2) to only two states /few, many/. This would lead to 3X2X2 = 12 cells in the design, with 2 or more projects per cell, as shown in Figure 3. This would allow some room for maneuver in project selection if the number of projects remained about 30 and at least two projects were selected in each cell in the design.

Detection System	Local Resources: Many	Local Resources: Few	Local Resources: Many	Local Resources: Few
Mass Multiphasic Screening	2	2	2	2
Mixed Screening	2	2	2	2
Exams	2	2	2	2
	Heavy Regional Office Coordination		Little Regional Office Coordination	

I would be happy to discuss these thoughts with you at your convenience.

Best wishes,

Joseph S. Wholey
Director
Program Evaluation Studies

cc:
L. Burner
C. Gershenson
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July 19, 1972

Mrs. Helen Howerton
Office of Child Development
400 - 6th St., S.W.
Washington, D.C.

Dear Helen:

This letter is in response to your request for thoughts on the design of the Health Start program in the third year. I understand that one of the options under consideration is to test a small number of program models specified in advance and imposed on the projects rather than allow natural variations to occur as was the case in the first and second year. As you know, the Urban Institute strongly urged that this approach be taken in the second year and I am convinced that little new information will be obtained from the third year of Health Start unless this approach is adopted.

My reasoning is as follows. While allowing natural variations to occur may lead to the development of many program models (and also less planning is required) obtaining information about the relative effectiveness of these models is much more difficult and the results are less conclusive than in the case where the program variations are imposed and more carefully controlled. If one of the main purposes of the Health Start demonstration is to identify successful procedures, strategies, and methods of operation that could be transferred and applied to Head Start or other types of health service delivery programs, then in the third year, OCD should be specifically testing those procedures identified in the first two years as being highly promising for possible transfer to other programs.

If the decision is made to test a small number of models in the third year then it is essential that it become a nationally directed program with national controls. Also there are a number of important technical problems that must be considered in the design of such a program. The major technical problems that should be considered in the planning stages are:

1. Selection of Program Variables for Testing

If the number of projects funded is to be small, then only a very limited number of program variations can be tested if any statistical significance is to be attributed to the difference detected between these

variations. After two years of Health Start experience, it should be possible to identify three or four program variations that have the highest potential for success and to carefully develop models of these variations to be tested in the demonstration.

It is obvious that before models are developed the decision must be made concerning the objectives of most interest to OCD. Based on our experience over the last two years, we could develop two or three models of high potential around such areas as: (1) coordination of health services (at national, regional, and local levels); (2) methods for delivering quality low-cost health services to children; (3) health education; and (4) linking children to future health care services.

2. Number of Sites

One of the important technical problems in designing a planned variation demonstration is to insure that there is an adequate number of projects of each model included in the design. At least three (and preferably four or five) replications of each model should be tested to insure that the effects of the variations can be differentiated in the analysis from the effects caused by unique features or characteristics of the projects (such as, differences in the ability of the coordinator and staff, differences in the health needs of the children enrolled, etc.)

3. Selection of Sites

There are two conflicting requirements concerning site selection where trade-offs must be made in the design of a planned variation demonstration. For purposes of control, one would like all sites to be as alike as possible in order to reduce the amount of variability caused by factors other than the differences in the program variations being tested. On the other hand, for purposes of generalization, one would like to have the program variations tested across as wide a range of background condition as possible.

Trade-offs between these conflicting requirements are usually arrived at by selecting three or four groups of homogeneous sites where the number of sites in each group equals the number of program variation to be tested, and the groups are selected to represent a reasonable range of background conditions. If for example, four different models are to be tested, then one might select four groups of four sites where the four sites in each group are as homogeneous as possible, and the four groups are heterogeneous in respect to background conditions.

3. Assignment of Models to Sites

The models should be randomly assigned to the sites in each group. For analysis purposes, this is an extremely important but often neglected design requirement.

4. Control

One of the most important administrative requirements is that the site selection and assignment of models be done by the national office.

In addition, the fact that program models are imposed on projects does not necessarily insure that projects will follow those models. It is essential that projects be carefully monitored from the national level to insure that the models are being followed.

I will be happy to discuss these thoughts with you at your convenience.

Sincerely,

Garth

Garth N. Buchanan
Senior Research Staff